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A STUDY OF THE ARTIST'S WAY
OF WORKING





THE ARTIST'S WAY OF WORKING IN THE VARIOUS HANDICRAFTS AND ARTS OF DESIGN

BY

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VOLUME II.

NUMEROUS ILLUSTRATIONS



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Michelangelo Buonarroti about 1534-4. D. The
the church of S. Lorenzo at Florence; the work of
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2. Statue called Evening, or Twilight (il Cre-



STATUE called Evening, or Twilight (il Crepuscolo); on the tomb of Lorenzo dei Medici in the church of S. Lorenzo at Florence; the work of Michelangelo Buonarroti; about 1534 A. D. The head and some of the parts are still rough-hewn, while much of the surface is finished. See Chapter XXIV.

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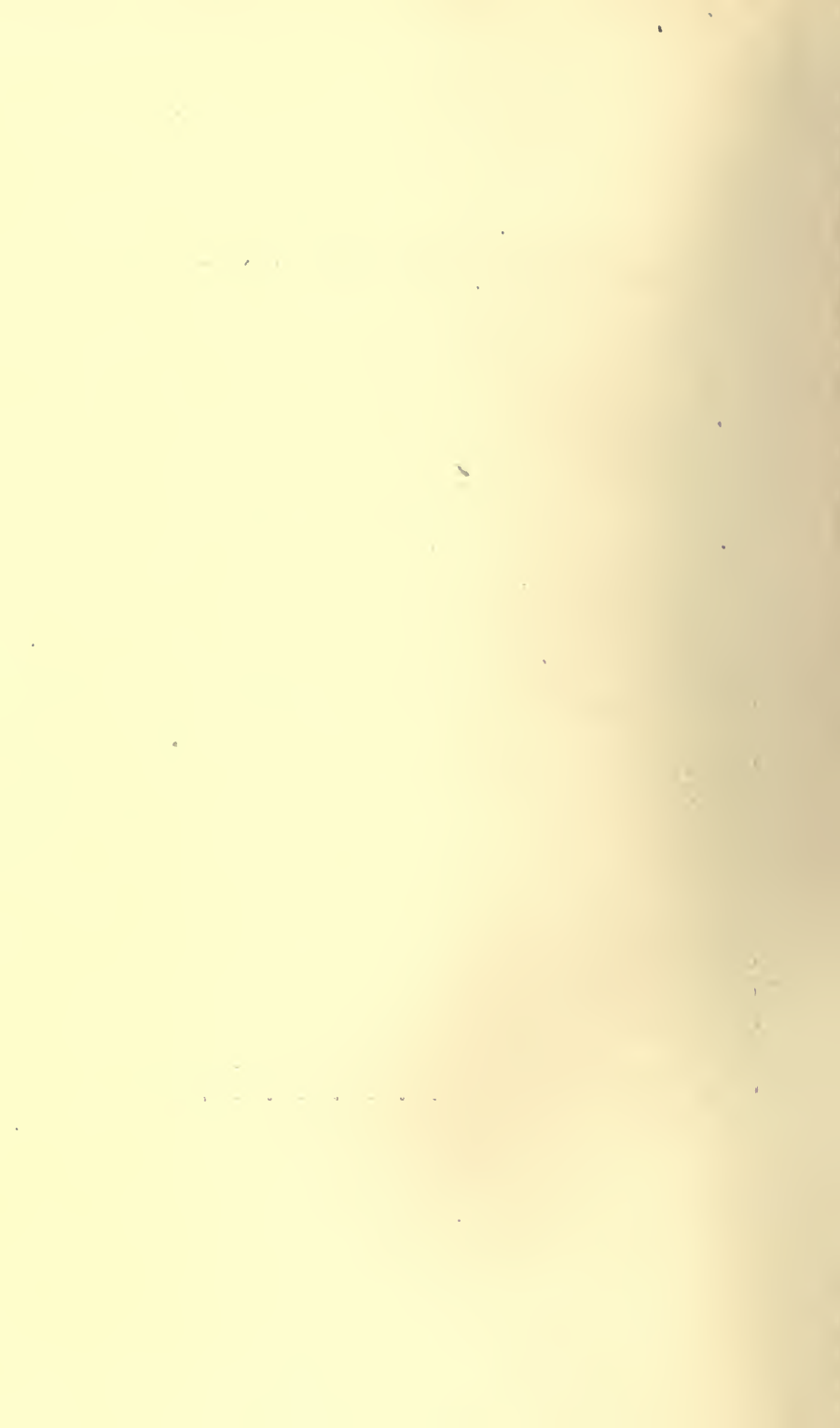
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THE ARTIST'S WAY OF WORKING — VOL. II

Chapter Seventeen

INLAY AND INCRUSTATION¹

THE beauty of natural surface, as of wood or marble which is variegated with veins and cloudings, has always attracted the attention of men who are not merely savages; and inlay may be considered largely an imitation of nature's processes in this respect. As is natural to human workmanship, however, the patterns chosen are either formal and very set, mere points and squares, or they have a general reference to the representation of visible objects.

The preparation for inlay is of the nature of carving in intaglio (see Chapters III and XXI).

¹ *Inlay*: the work done by setting one piece of material into an incision made in another, usually so that the surfaces correspond exactly and a uniform plane is left, as if of a single piece of material. It differs from mosaic in that there is a comparatively large surface into which the usually smaller surface is inserted, whereas in mosaic the assumption is that the whole surface is made up of small pieces. Moreover, mosaic is used as a whole sheet of new matter, to cover a previously prepared solid surface, while inlay is an adornment of a solid surface intended to be displayed. *Incrustation* is a term used loosely for the inlay of pieces of some independent character of their own; thus a relief-carving in ivory or a disk of mosaic when let into a panel is said to be incrustated.

The filling of the intaglio may be of hard material prepared by carving, in which case every line has to be cut twice, for the inserted piece as well as in the incised surface; or it may be of soft material which will harden sufficiently for the wear which it will have to undergo; or it may be of many small pieces fitted together, a kind of mosaic let into the solid substance. Fig. 121 shows part of a cypress-wood chest carved by an Italian of the fifteenth century for the purpose of producing an elaborate inlay. The incisions still retain traces of the blue and green mastic with which they were filled. It is evident that this pasty material, which hardens sufficiently for ordinary usage, was filled in level with the smooth surface of the wood. The smallest incisions, the delicate lines which express rounding of the folds of drapery were left unfilled by the mastic, and told as lines of shade, nearly as now.

Inlay in stone, marble, and the like, is very largely architectural in character. The simple and direct methods of antiquity, admitting readily the use of the paint-brush for all surfaces where brilliant color was desired, always excepting pavements to be walked upon, hardly recognized inlay except in metal work; but the Middle Ages, especially in Italy, and the whole epoch of Moslem art in the East, were characterized by the use of this method of adorning walls, and especially the smaller members of a structure, such as niches, recesses, archi-



FIG. 121. Part of cypress-wood chest, the whole pattern incised, and formerly filled in with colored pastes. Florentine work, about 1400

volts, lintels, and the like. It is noticeable, however, that much architectural work of the kind approaches very nearly to the nature of mosaic; see Chapter XVIII; for where an archivolt is made up of alternate pieces, red and grayish white, that is inlay only as the whole façade may be considered. Except for its large scale, we should call it an incrustated mosaic. This is not what is here to be described. In the East, inlay is largely used in the adornment of large upright panels and flat surfaces for interior decoration, as where one marble is cut into by bands and simple patterns of a different marble, without disregarding at all the rich color and veining of either of the two materials. Thus, a panel of veined yellow marble will have stripes of clouded white and of dusky red, the veining of each enhancing the charm of the whole composition. Nor do these able Levantine designers make the mistake, a mistake common in the West, of supposing that a pattern is effective only when every separate small member of it at once proclaims itself and shouts out the fact of its existence and its place in the whole design. One hears Western ladies objecting to work of this kind when done for them in the current years, because the pattern does not show plainly enough, and one is gravely told that there should have been chosen a marble or a wood in which the veins and the changing color would not so much interfere with the visi-

bility of the precise zigzags or curves of the design.

A finer kind of work than that of the Moslem East has been done in parts of Italy, and one need only remember the exquisite patterns inlaid at the back of the porch of the Cathedral at Lucca in Tuscany; lovely in themselves and perfectly effective in their placing (see Fig. 122). These and a few like them are generally lost sight of in the question of external decoration by means of natural materials, but the splendid work which we must consider in the next chapter under the head of mosaic must not blind us to the beauty of these too rare pieces of inlay in the true sense.

It is, however, in that work which was afterwards called "Florentine Mosaic" that the Italian inlay in hard materials reached its greatest development, if not its most perfect artistic success. The table tops in the galleries of the Pitti Palace are, some of them, of great single pieces of precious material (there is one wholly of lapis lazuli); but there are also those which contain the most splendid specimens known of Florentine mosaic, and these, though each enclosed medallion or square compartment is mosaic in the true sense, have the general character of an inlay in a surface of white or black or richly colored marble. Something of the same kind is to be seen in the wonderful sacristy of S. Lorenzo at Florence. Here even the lover of refined art, which he



FIG. 122. Lucca Cathedral. Detail of Façade (finished 1200),
to show marble inlay



FIG. 123. Florence, Church of S. Lorenzo. Marble facing of the Cappella dei Principi. The work of Matteo Nigetti, about 1604

loves the more for its severe restraint and its limitations self-imposed, cannot fail to be impressed by the sense of abounding wealth of fancy, and of freedom from the ordinary outside restraints which commonly keep the designer from doing his best. Large parts of the walls are incrustated with slabs and tiles of the most beautiful natural marbles, porphyries, and other semi-precious stones, but more minute inlays are used freely as well, and a remarkable instance of this is contained in each of the heraldic shields standing for the Tuscan cities, and set in the low dado; see Fig. 123.

Italian inlay is seen at its best — at its most intelligent and most considered point — in the wood-work used for the fronts of large pieces of church furniture, the canopies and ambries in the sacristies, and the like. Many of the choirs in central Italy are lined, and the stalls for the choristers are built, with dark wood into which a light yellow wood is inlaid, not only in lines and checkers, but still more frequently in a free scroll-work, a kind of subdued arabesque checked in its extravagance by the necessity of cutting its lines in wood, first as the artist cuts the incision in the dark plank, and again as he shapes the piece of yellow wood to the opening. A reference to Figs. 115 and 116 will show how perfectly this inlay in wood is fitted to the purpose of such ecclesiastical furnishing. This work, called *tarsia* and by the name of the process or work itself, *intarsiatura*, became so

popular in Italy that it was imitated in painting, and mention is made in Chapter V of certain very extensive compositions of woodwork in a great Italian city filled with the most elaborate and charming designs, and thought worthy of special publication for the study of the architect and mural painter, which compositions are all closely imitated by the paint-brush from the genuine wood inlay of the time. Fig. 28 in Chapter V shows a piece of such imitation of tarsia; but no student of the photograph could distinguish it from a veritable inlay. The taste for such design was caught up in the far North, and the Dutch furniture of the sixteenth century is enriched with the most elaborate inlays of white wood, yellow wood, ivory and pearl upon the dark red material. This decoration is applied freely to large cabinets, chests of drawers, wardrobes, and tables. In this the powerful influence of Oriental design is seen. The intercourse which the Dutch kept up with the Japanese, an intercourse for many years limited to them among European nations, and their free importation of Chinese porcelains, could not but affect the design of such work as this, and accordingly the action of Oriental design upon the Northern artist in flat patterns led to a less severe and more hybrid and, therefore, more unrefined mode of design in the Low Countries. The Italians, and more especially the Portuguese, made inlaid furniture too, but used ivory the rather as

the material of the inlay ; but the Oriental design, which controlled these men too, worked toward a far more interesting result. Portuguese work and that of western India, done partly to please the Portuguese of Goa, in the seventeenth century, are undistinguishable; and both are beautiful, whether in embroidery, or metal-work, or inlay.

It is curious to see how easily and cheaply the inlaid work was done, in the full efflorescence of the style. The ivory leaves of the scroll-pattern top of a chest were made, fifty of them of one pattern, and the placing of these uniformly shaped leaves was relied upon to prevent one's perceiving that uniformity (see Fig. 124). The scroll itself would be of the lighter of two woods, the leaves of ivory, and this ivory scratched and scored by the tool, and the incisions filled up with some dark pigment, by way of expressing the natural veinings; and the design would culminate in an elaborate piece of flower-work, an anthemion or bouquet, with ivory helped out by mother-of-pearl. Human figures were introduced also and with perfect naïveté, the artist caring nothing for the character of his drawing so long as he could produce an effective spot of ivory-white on the dusky ground, a spot larger and more diversified in outline than mere leafage would give him. It is notable, too, how often inlay is combined directly with carving. A chest of the splendid kind used for the bridal trousseau and made espe-

cially to contain the sumptuous embroidered robes fit for the occasion, would have the corners (see Chapter XVI) worked into uprights, perhaps of architectural character, with colonnettes having elaborate capitals, or perhaps with some semblance



FIG. 124. Chest, carved and inlaid with ivory :
Italian work of about 1450

to the human figure, as in the architecturally composed statues of a cathedral porch ; and all along the base of the chest near the ground, would be a carved band of considerably rounded projection, which would be echoed by the sculptured edge of the lid. All these carved parts would be invested with inlay, the good sense and right feeling of the artist showing him that this inlay must be limited

to very small pieces, so that the man who had made the leaves on the flat top three inches long would use spots for the moulded surfaces, of diversified outline indeed but never more than an inch in diameter, and mere glistening white points for the elaborately rounded and more diversified parts, as in the suggestion of a spotted garment of a statuette; all as shown in Fig. 124.

A new departure was taken in the Boulle work of France in the seventeenth century; and it is very hard to decide whether this is to be treated here or under Mosaic. It is so far mosaic, that large parts of the cabinet or wardrobe are covered with the pattern made up wholly of the separately applied pieces; but these pieces are rather large and varied scrolls and leaf-sprays. The essence of the thing is in the counterchanging¹ of the parts (see Chapter XX). This is done by sawing out the pattern from a number of pieces of, say, brass or latten, and corresponding pieces of tortoise-shell or veneer of wood; thus producing, by one process, ten or a dozen scrolls precisely alike in outline, and also as many thin plates pierced with the same scroll pattern. Then you may interchange these, each with the other, so that the scroll of pale

¹ *Counterchanging*: In heraldic bearings, the breaking of one color into another and the reverse, when the two surfaces of color are adjacent. Thus in an escutcheon of which the field is divided into black and gold and a lion charged upon both, the lion is gold on the black field and black on the gold field; and that lion is said to be *counterchanged, or and'sable*.

yellow or silver-colored metal shows on the tortoise-shell or the wooden ground, and the reverse. The scroll-pattern of metal may show on the dark ground in one part of the piece, while its counterpart, dark on the metal ground, is seen above or below; or the one effect only is visible, the reversed design being used in another cabinet. Fig. 125 shows a splendid piece of this kind, belonging to the French nation; but the very fact of its richness of design makes it hard to understand from the photograph, because the gilded bronzes in relief confuse the inlaid pattern. There is no counter-changing in this piece; another cabinet of the same set shows the reverse of all the inlaid patterns.

There are other kinds of inlay which must be mentioned, and one of these in connection with the art of book-binding, of which indeed it forms the richest method of adornment, unless the binder goes afield seeking for wrought metal, embroidery, or painting on vellum. Inlays in leather are produced by cutting out the pattern in the solid leather cover to a depth of one third or one fourth of its thickness, and then gluing into the sinkage another piece of leather exactly filling it. If now the outlines are disguised and also emphasized by lines of gold, and perhaps each colored inlay itself impressed with a flower in gold, we are reminded at once of the splendid work of the sixteenth century, of which more is said in Chapter XI. Thus in Fig. 126 the top cover of the book which is shown

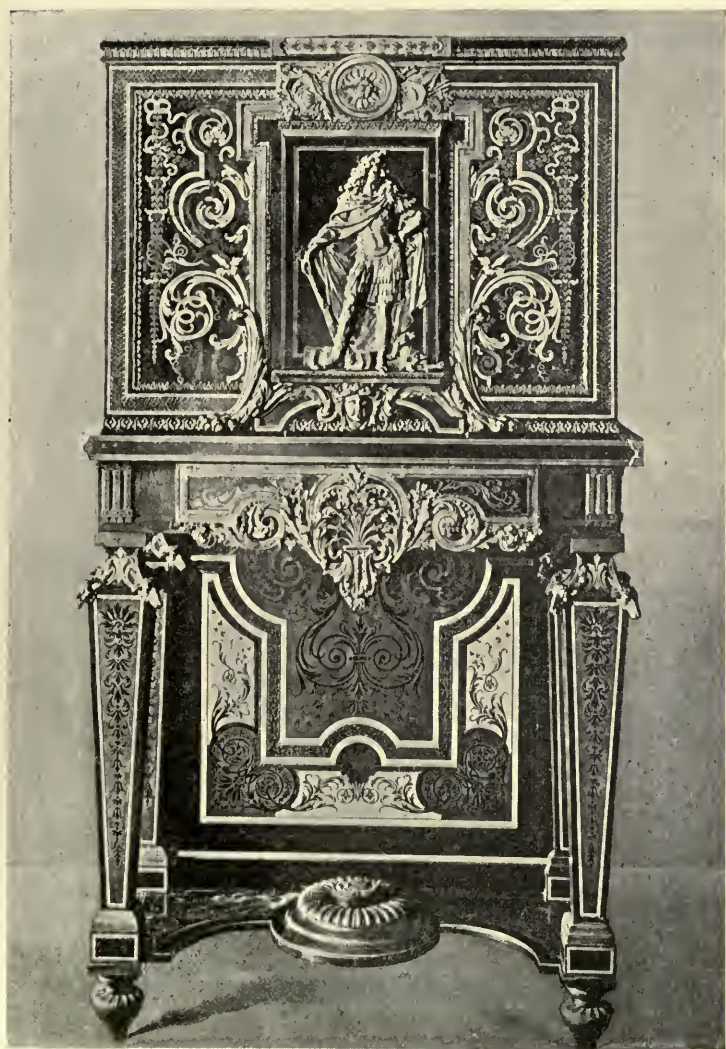


FIG. 125. Cabinet by André Charles Boulle (d. 1732) in the
Louvre Museum
(From "Le Mobilier Français")

is a little more than 6 inches wide by $8\frac{3}{4}$ long, and is covered with dark red morocco, pressed and polished until the greater part of the surface is glossy. The inlays are of three colors,—the five-



FIG. 126. Modern Inlay of Leather, ornamental Binding
(Collection of Dodd, Mead & Co.)

leaved flowers and the flowers seen edgewise are scarlet, and the leaves which surround these flowers are of a dark green; the gold lines in each case marking accurately the division between the inlay and the dark red background. In the fillet or

scroll which makes irregular curves in each corner, there are twelve patches of paler green; here there is a band of the dark red ground left between the inlay and the gold lines.

Inlay must be considered also in relation to metals; and of this, although it is usual enough to insert lines of silver or of gold in reddish brown iron, as in certain very elaborate cigarette cases and the like, it is also a familiar device to use what is called damascening for much more elaborate and artistic work. Now damascening,¹ though as defined below it is a somewhat elaborate process, is closely imitated by the mere gilding of a roughened and slightly abated surface, and much in Oriental work which we call damascening in gold is in reality merely gilded in this way. Damascening proper, then, is a process so elaborate and requiring so much skill that its use is limited to formal patterns, and almost wholly limited to the more leisurely people of the nearer East, the Moslem lands which once obeyed the Kalif of Bagdad (see Fig. 68).

Inlay in metal includes also those kinds of enamelling (see Chapter IX), in which the enamel shows upon a background of the metal itself.

¹ *Damascening* (Damaskening): The ornamentation of a surface of metal by engraving lines and small patterns in such a way that the incision shall be a little broader below than on the surface, and then forcing into the incisions a softer metal. Much the most common form of this is in the gold inlay of iron.

This is notably the case with *champlevé* enamel, or that *en basse taille*. And there is still to be mentioned that curious substance, niello,¹ which was created expressly for the purpose of forming an inlay in bright metal and seems as if it formed a natural part of it, like rust upon iron. Niello as defined is a mere paste, which, however, hardens and proves, if not as permanent as the metal itself, still sufficiently durable, though not allowing the absolute bending out of its shape of the metal plate. Niello is considered in Chapter XIX, in connection with Engraving, and its earliest use in Europe seems to have been to fill up the incisions of engraved silver plates, as in altar-vessels and other objects of Roman Catholic ritual. It is chiefly used nowadays for small objects of convenience and for toys; thus Fig. 127 shows a snuff-box of very elaborate design in the engraved silver top, sides, and bottom, the incisions being filled with niello. It will be noted how closely this kind of inlay resembles that suggested by Fig. 121. The Russians, however, who have retained a specialty in this sort of work, use it for the icons² which are made cheaply and in great

¹ *Niello*: An artificial sulphide of silver, copper, and lead. It is melted and fills the hollows of the metal while heated until the incrustation is perfect; it is then polished smooth.

² *Icon*: literally an image; in liturgical art a representation of a sacred personage. The term is especially applied to small portable tabernacles of Byzantine or Russian origin or to somewhat larger sacred representations used as shrines in private worship.

abundance, and also export a great deal of decorative metal-work adorned in this way.



FIG. 127. Silver box, decorated by engraved pattern
filled with niello

It is evident that the essential characteristic of inlay is the contrast between the colors or the textures of the two surfaces, that of the original

mass and that of the inserted piece. It is stated above that these surfaces themselves may be so varied by veinings or cloudings that the inlaid pattern becomes less sharply visible; and that this is not necessarily a fault.

It is, however, a danger. The artist in inlay admits these modifications at his peril; his business is with the yellow pattern on the reddish-brown ground, the gold pattern on the nearly black surface of the iron, the turquoise and the agate on the white and black marble of Florence. The designing of inlay is, then, very like that used in flat painting (see Chapter XX); and the right application of drawing (see Chapter VII) is the foundation and essence of all successful inlaid work.

The artistic character of incrustation differs from that of inlay chiefly in this, that the inserted piece does not necessarily form one surface with the solid material into which it is set. The business of inlay is to be one with the background — one in surface, in polish, in homogeneous character, so that the background with the inlaid material may form one pattern. Incrustation is less restrained in this way. A piece of material adorned by inlay, or a piece of mosaic (Chapter XVIII) may be incrustated in a solid substance. Again, a medallion in relief or a piece of carved marble or wrought metal, having much irregularity of surface, may be incrustated in a smooth surface from which it projects freely. An effect-

ive form of this art is practised by the Japanese, who employ the incrustation of many different materials in a surface of lacquer, of smooth wood, or of metal, as explained in Chapter VI, where an incrustated panel is described. In Fig. 128 there is seen a rather more simple piece of work, Japanese of the eighteenth century. There is one whole school of Oriental design marked, at least for foreigners, by the very free use of pearl and other brilliant materials employed in this way for incrustation. The piece, Fig. 128, is a tray, the part shown being fifteen inches long. The background is dark brown lacquer; of lacquer relief-painting are also the long leaves, dark green, the handle and rib and border of the fan, and the cord and tassels, which are red. Of pottery with a white glaze are made the largest flower, the bud, and the square tablet with the artist's name; and of pottery glazed in white and green, the formal flower in the middle of the fan. The two remaining flowers are of mother-of-pearl, white and yellow in general effect. Finally, the half-disks on the fan, one of which resembles a butterfly, are of tortoise-shell of pale yellow color very iridescent, with a pattern in gold lacquer. There is here a combination of methods; the pearl and the pottery are really incrustated, the shell is merely glued down like a piece of veneer, the lacquer-work is a kind of painting.

It is evident that the designer uses his pearl, his

porcelain, stained ivory, blue alloy, silver-colored bronze, and the like, as he might use pigments. He

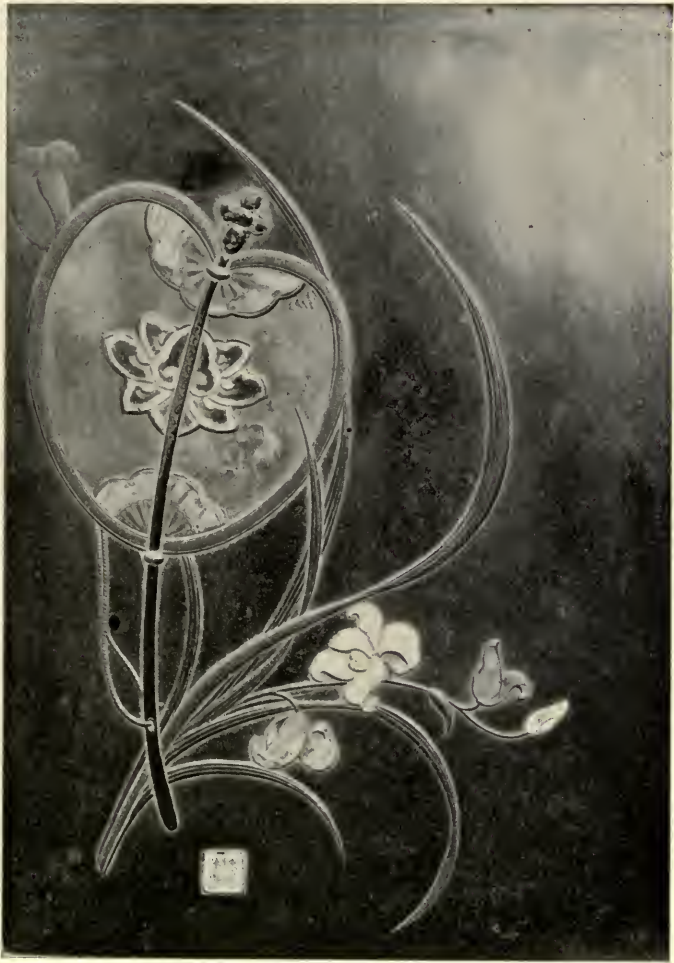


FIG. 128. Part of a lacquered tray, Japanese work, about 1750

cuts out a scrap of his iridescent or brilliant metallic or vitreous material with the same half-con-

scious thought, going straight to his mark with the shears and brush dipped in glue, as he might



FIG. 129. Cover of box, made of dried rushes, varnished and decorated with appliques of lacquer and mother-of-pearl.
Japanese work, nineteenth century

with the brush dipped in paint, or the colored-chalk pencil. The limitations, as of greater severity, which cannot be modified, and must be accepted, and the rest of them,—all these are

felt rather as suggestions of design than as hindrances to it. One does not know the full delight of decorative design until he has to do some work with these obstinate materials, which must be taken as they are because they cannot be modified more than a very little by the artist. But this chapter may close with a specimen of freer work. Fig. 129 is a box or basket of *Vannerie*, that is, of work done with rushes held together by a kind of sewing, for it will be noticed that the rushes are not woven or plaited together, but are laid side by side. Upon this rather stiff and yet not wholly unyielding surface is applied the design in high relief, consisting of flowers and long leaves of the iris. Of these long leaves two only are made of pieces of brilliant mother-of-pearl, flashing with all the colors of the rainbow, the material cut into small square tesserae and put side by side—this probably to allow of a certain play when the surface is compressed. The same pearl is used for the calyx of the flower on the right, and for the lower petals of the flower on the left. All the rest is in dull gold lacquer, except the largest leaf, which is of dull slate-colored lacquer with a gold rib. It is in such inexpensive pieces as this, made for the use of the Japanese themselves, and never costing but a trifle in their own mercantile transactions, that there may be felt in the fullest degree the significance of that astonishing civilization.

Chapter Eighteen

MOSAIC¹

MOSAIC results from the use of inlay whenever the pattern grows so complex that it is easier to make it up of small pieces than to cut it in a solid smooth surface, and then to insert other pieces of material. This is the way in which it appears first in Egypt, at least as early as the time of Rameses III, at which time patterns made by inserting pieces of colored pottery into a cement background grew into mosaic in the parts most elaborately adorned. At a later time mosaic of

¹ *Mosaic* : a combination of tesserae or small pieces of hard material producing a single, uniform surface. The term tessera (plural, tesserae) signifies a four-square piece ; but the use of the term in industrial art covers pieces of any shape which fit close together and produce a continuous surface. Probably the cones of terra cotta used anciently in the flat country near the Euphrates would hardly be considered as forming a mosaic. They are pieces of inlay forming spots, of which the background is composed of the cement-like material which forms the pavement. On the other hand, if the pieces of hard material touch one another and cover the whole surface, they constitute a mosaic, no matter what their size may be. Thus certain twelfth-century churches in central France and certain mosques in Egypt and in Spain have a parti-colored masonry, the blocks of the exterior wall producing a polychromatic effect ; and there is no way of excluding that work from mosaic, of which it is one modification.

hard stone was used on the wall surfaces of Egypt; and, in what we call the Mycenaean art of Greece, there is an inlay of blue glass which often becomes mosaic by an increase in its elaboration. It does not seem, however, that anything like a solid pavement made up of tesserae, or a wall or vault covered in this way, is to be identified as of any period earlier than the first century B.C.

It appears, then, that mosaic as we have it, a somewhat familiar decoration for floors and walls, is of the time of Roman supremacy in the Mediterranean lands; and although it came from the East, probably in the Alexandrian epoch, its use so exactly corresponded to the requirements of the imperial builders that we find it as much at home in the costlier dwellings and public baths of Britain and of Spain as in Syria. Fig. 130 shows a pavement still remaining in place in the Baths of Caracalla, in Rome. There are many pieces of this pavement, sometimes in place, sometimes taken from their original site and set up (so perfect is the cohesion of their cement ground) against the wall. The material is always marble or fine limestone, most of it nearly white, with patterns formed of a very dark gray, looking almost black by contrast.

Under the Imperial government mosaics of much greater splendor than these were made for public buildings, and also for private villas and city mansions. Marble, slate, and other fine-grained stones

were commonly used, and various positive colors, red and yellow, were got by the use of fine hard brick. The magnificent mosaic representing Alexander and Darius in the battle of Arbela, which was found in the House of the Faun in

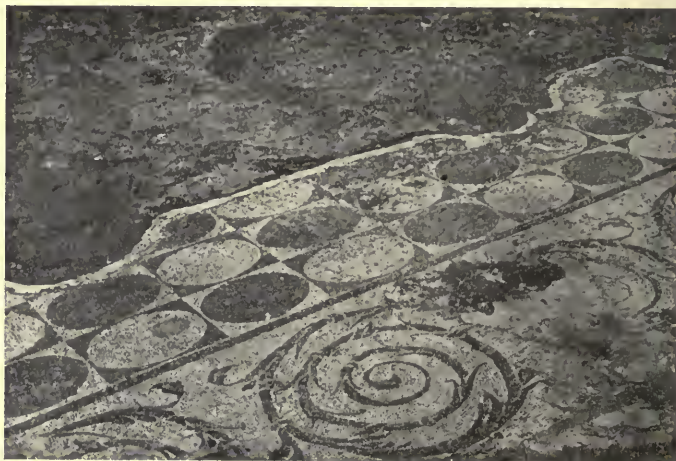


FIG. 130. Part of a mosaic floor, third century A. D.
Ruins of Baths of Caracalla, Rome

Pompeii and has been relaid in the Museum of Naples, is of the first century B.C. In this a great number of colors are used. The details cannot be absolutely guaranteed, for the work of removal and resetting was done at a time of no very critical judgment, but the general design cannot have been changed, and this design involves the use of some score of distinguishable shades. Still, however, all seem to be of natural material. The pieces vary in size in these and in other elaborate mosaics of

antiquity, from an inch in width to twice that linear dimension. Nearly all are of marble, and it seems clear that finely colored tesserae have been cut with care from the chosen parts of the slab; and we can understand that they were prepared in advance, and piled up in assorted colors. Where such delicate mosaics were used for floors, the custom must have prevailed of taking off the out-of-door shoes on entering the inner chamber, as is now the rule in many parts of the Orient. Mosaic was used in the Roman Imperial epoch for wall covering and for the vaulted roofs as well, but not so generally as in more recent times, and this probably because of the vast number and variety of magnificent natural materials in large pieces, which the Roman master-builders had at command. The freedom with which costly marbles were brought from all parts of the empire to any great officer who could pay for them is incomparably in advance of anything which the Middle Ages or the fifteenth and following centuries could secure—times when the ancient marbles of Rome were gradually torn from their places and used for such altar-fronts and similar internal decoration as we now see in the cities of Italy. The Romans, too, used glass tiles of great beauty, and stucco of a perfection and excellence far in advance of anything known to post-classical times in Europe, and they knew how to color this stucco in its very mass without in any way

interfering with its hardness or perfect polish, and also to put admirable relief-sculpture into this material. Mosaic, therefore, was not the all-important thing that it came to be in Christian times, and it was in domestic interior work, rather, that the Roman artist used mosaic with perfect freedom and facility. Fig. 131 shows some pieces from Pompeii: a column and three squares cut from the wall of a peristyle or triclinium and framed as if they were "easel-pictures." A further elaboration is shown in Fig. 132, for here the surface upon which the tesserae are inscribed is raised in bas-relief,—an effect never reproduced in later times, so far as known.

The time for the true glory of mosaic did not come until the Byzantine period. Then, in the fifth and following centuries, in the lands held in comparative tranquillity and peace under the rule of the Byzantine emperors, this art superseded all the other arts of architectural decoration and reached its highest artistic glory. Sculpture had almost disappeared from the Mediterranean world,—its rapid decay being evident as early as the beginning of the fourth century; there was apparently no memorial painting of any scope and force, for even the paintings in manuscripts were feeble and hesitating, devoid of all charm except a certain remaining sense of color harmonies; in fact, so much of great art as depends upon skill in drawing the figure, with all that that implies—knowledge, scope,



FIG. 131. Mosaic-covered columns, and wall mosaics, from Pompeii. National Museum, Naples



FIG. 132. Roman mosaic from Pompeii, the figure modelled in relief stucco before the tesserae were inserted, first century A. D. Naples Museum

grasp of the possibilities of grand composition — had disappeared. Still, however, the decorative sense was strong in man, and indeed the old barbaric feeling, the love of the comparatively unpoliced, unsophisticated man for vigorous contrasts and decided harmonies of color, kept within simple ordonnance of lines and space, was the dominant intellectual quality of the time. The technical work of mosaic was easy to master. Men did not need more than a few months' apprenticeship to handle that with approximate excellence; the two tendencies, that toward simple design and that toward the obvious and straightforward process, aided one another well, and the result was a series of mosaics of extraordinary beauty. The same feebleness in representative drawing and the same strength in abstract color which told well on the illuminated page, told with even greater effect upon the church wall; and the broad and simple masses of the architecture of the time, without constructional elaboration and without complexity of parts, allowed the architectural designer abundant space for his efforts. We have, then, in the churches of Ravenna on the east coast of Italy, and of Constantinople itself, as well as in those few Byzantine churches of the Levant which have not been destroyed or whitewashed over by the Moslem rulers of the land, mosaics as beautiful as the world has ever seen; less perfect in knowledge and in linear design than the Greco-Roman pieces, less

gorgeous in color than the later ones of Venice and Palermo, but as fine as they in abstract qualities of design. In the city of Rome the earlier basilicas were also decorated with mosaics; but the oldest of these have disappeared, and the magnificent compositions which replace them are of a later date. Still, however, the mosaics of S. Prassede, S. Clemente, and S. Saba in Rome are of a date as early as the tenth century, and, though with less simplicity and less willingness to admit the use of the human figure, approximately well drawn and perfectly handled as a decorative appliance, are great in the decorative effect of their scroll and pattern designing. S. Mark's at Venice has no mosaics earlier than the twelfth century, and the important ones are of a later date. Still, the primitive character of the design in the mosaics of the great narthex marks well that mingling of Byzantine feeling for the human form and natural objects treated in a decorative way; while the splendid architectural effect produced by this investment of the low cupolas and their supporting arches and pendentives is familiar to all travellers. All can enjoy such architectural confirmation of form and color as we have in the interior of this church; no training in the technicalities of design will help the lover of decorative art very much. Fig. 133 is the northern arm of the narthex, with the doorway leading eastward into the north transept of the church. Fig. 133 *bis* is the central



FIG. 133. St. Mark's, Venice; north arm of narthex. Mosaics of twelfth century and later

half-cupola in the western narthex, over the doorway which leads directly into the nave. This single figure is the famous St. Mark from the cartoon of Titian, with the "iscrizione ampollosa" put up by the mosaicists, the brothers Zuccato.



FIG. 133 *bis*. St. Mark's, Venice ; semi-dome over middle doorway in West Front as seen from the narthex

The flash of the light upon the gilded glass tesserae of the background shows well the effect of this irregular though brilliant surface, and explains the non-metallic—the not too lustrous—character of this gold-backed design.

The old church at Palermo (La Martorana) and the cathedral at Monreale have a different chromatic system, for the northern ones are powerfully

aided by their gold ground, while the southern ones, like those of S. Prassede in Rome, are blue and green in their general effect, with gold much more sparingly used. It is not to be assumed, however, that the southern mosaics are better on that account, or that the free use of gold in this way is at all an evidence of a taste for garish or dazzling effects. Gold in such designing as this is the reverse of garish and dazzling, it is a great unifier; and the worst that can be said of the Venetian designers is that they were more willing to resort to this powerful aid to their compositions than were the Sicilians. We may even admit that it argues a certain superiority of the Sicilians over the Venetians in abstract power over color, nor would this be a surprising thing if it were demonstrated, for the Sicilian was working under a powerful Oriental influence, with Persia much nearer to him, spiritually, than to the Venetian. Fig. 134 shows one room in the old royal palace of Palermo, a mediaeval building with many of its rooms hardly altered since the times of the Norman princes. The vaulted roof is entirely in mosaic, as are the very large lunettes, but the wall below is sheathed with marble slabs forming a kind of dado, the borders adorning which are composed of that sort of incrustation (see Chapter XVII) in which the piece fitted in is itself a mosaic of very small parts. The famous Cosmati work is of this character. Fig. 135 shows two



FIG. 134. Palermo, so-called Stanza di Ruggero in ancient royal palace. Mosaics of twelfth century



FIG. 135. Cosmati work, mosaic of small glass tesserae inlaid in marble : cloister of the Lateran, Rome

columns of the cloister of S. Giovanni in Laterano in Rome in one of which the tesserae are nearly all in place and the intended effect perfectly given; while in the other column little is left but the preparation for the mosaic, which has now again disappeared.

The mosaic of the Byzantine Empire and of mediæval Italy was most commonly of glass, though tesserae of natural material were used also. These pieces of glass were deep in proportion to their width, and were set in a surface of such material as would remain soft for a reasonable length of time and would gradually harden around the roots or tangs of the tesserae and hold them all permanently. The way in which the work was done was evidently by preparing a cartoon of the pattern, by laying upon the different parts and details of this cartoon the tesserae themselves with their faces down, by preparing the surface, and then by taking up the tesserae one by one and inserting each into its place, perhaps under the guidance of another copy of the cartoon. This sounds complex; and the process must have been a slow one, but the cost of manual labor, even of some excellence, was not great; and time was not as seriously considered then as in busier ages. The superiority of the work so done over modern devices by means of which the mosaic is made up of thin pieces like bits of veneer, all glued to a thin portable surface, so that large sections can be

transported without trouble and put up quickly — the superiority of the old process in the facility given the artist to see his work continually from the front and to do it with his own hands, instead of leaving the actual handiwork to ignorant helpers, is evident. It was, moreover, superior in importance and dignity because intended to be everlasting, nor did any one dream of putting such work into a house which would in all probability be torn down or altered within the course of a third of a century.

The natural evolution of glass mosaic was toward the multiplication of colors and the diminishing of the size of the tesserae. As from the thirteenth to the sixteenth century men grew less and less intelligent as decorators, and more and more intellectually curious and desirous of representing outside objects in their wall work, so their figure pieces became less abstract, and all sorts of landscape effects with architecture were sought for and carried out tentatively. This has resulted in the extraordinary modern art known as Roman Mosaic, for which many hundreds of colors are used, the glass being furnished in little canes or rods which can be cut at pleasure to the length required, so that the small end of the rod only is shown in the composition. It is in this way that the table tops with views of St. Peter's church in Rome, and the like, are made and it is nearly in this way that the vaults of that church itself are

adorned. The process would be free from fault if used strictly for monumental designs.

The nineteenth century saw decided efforts at a rehabilitation of the great art of mural mosaic. The work in St. Paul's church in London under the direction of Sir W. B. Richmond is very noticeable. The fault in this, as in so much modern work of the kind, in windows as well as in opaque mosaic, lies in the too strong desire to make a telling picture with narrative or associative quality, and the comparative disregard of that in which indeed modern designers are the least strong, the decorative quality pure and simple. If mosaics fail in adorning the vault or cupola in the best possible way they fail indeed! It is of far less importance to the world that a piece of religious symbolism should be re-stated under new conditions than that the cupola of a great church should be, as seen within, a truly beautiful part of the whole design.

Mosaic in a softer material and a less stately form, such as that which is done for the adornment of furniture, is much less common in Europe than in the East. Inevitably this work partakes of the character of inlay. In Fig. 136 all the ornamentation of the two cypress-wood chests is inlay, that is to say, each separate piece of ivory is inserted into a bed cut for it, except in those bands where the pattern is the most thickly packed, where it has been found easier to alternate the bits

of ivory and of wood and so supply a real mosaic to that extent. Modern imitation of this siculo-



FIG. 136. Mosaic of ivory and pearl inlaid in cypress-wood chests. Sicilian work under Eastern Moslem influence ; probably eleventh century.
Palermo Museum

Arabian work is done entirely by a process of fitting together colored rods of wood, like the glass
[360]

canes named above, and it is therefore a true mosaic.

We are brought to the question of translucent mosaic, namely, that of which is made up the more ornamental class of mediæval and modern windows, European and of the Moslem East.

Decorative windows in Syria, Egypt, and the Balkan peninsula are made by setting pieces of colored glass in the piercings of a slab of marble, or the openings moulded or cut in a slab of hard plaster. This rigid and unmanageable method has kept the system of design primitive and simple — severe in composition, though vivid in color. Fig. 137 gives the interior of that part of a very small mosque which contains the niche marking the direction of Mecca (the Mihrab), and the pulpit beside it. The windows high in the wall show a most interesting combination of opaque and translucent decorative effects. It is evident that the window is built in a wholly different way from that followed in Europe. The solid part of the frame covers much more surface than does the glass; moreover, the small and detached bits of glass require no great precautions in holding them fast; the adhesive quality of the plaster is sufficient. The use of such windows in connection with the brilliant colors of marble and ceramic tiles, which adorn the interiors of the Levant, gives an architectural result altogether unlike that produced in our Western churches. In these the almost wholly

monochromatic interiors depend upon the much more splendid glass of the West. This in its finest examples is superior to the paler and flatter color-



FIG. 137. Cairo, mosque of Kait Bey ; interior, showing windows of colored glass

ing of Cairo or Damascus by all the distance that there is between the simplest and the most complex color gradation; and yet, to quote the most sympathetic of the writers on Moslem art, Albert

Gayet, the charm of this glass is singularly soft and subdued, the light seems to come from far away ; it is an effect which is in the highest sense artistic. Fig. 138 gives two diagrams, taken from Gayet's book, of windows in a Cairene mosque.

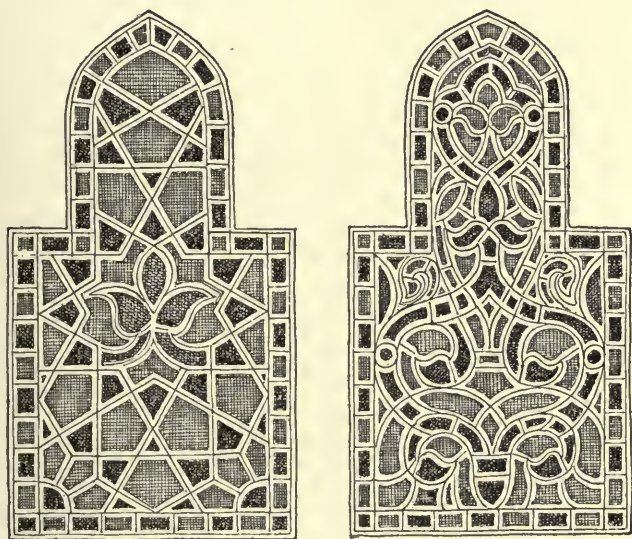


FIG. 138. Mosaic of colored glass set in plaster or marble frames : from a mosque at Cairo, now in the museum there

(A. Gayet, "L'Art Arabe")

In beginning the discussion of European mosaic windows it may be well to speak, first, of an opaque mosaic which in very recent times has grown out of this window-work, and which has been made in small pieces and for private delight chiefly. This is to be discriminated from the Byzantine and Italian mosaic of glass tesserae described above,

for it is leaded—the pieces are thin and flat and are held by leaden sash-bars. The pieces of glass may be of all sizes up to four or five inches in greatest linear dimension, and the glass itself is not unlike that used for decorative windows, but it is chosen with a view to its effect by reflected light, and not at all with a reference to its appearance when seen by light passing through it (see Chapter IX). This being established, it is easy to understand that an elaborate pictorial design with brilliant birds and splendid flowers can be put together as a window is put together (see the next paragraph), and laid fast upon an opaque ground, the whole producing a panel of great softness and charm, if well designed. Indeed, the only hindrances to the free adoption of this method of internal decoration are in its considerable cost and in its mingling of refinement and splendor, so much exceeding that of most of the methods of decoration used in modern domestic work.

As to the windows themselves, something has been said in Chapter IX as to the method of their preparation. The combination of the pieces of glass into a continuous surface as large as the whole opening of the window or of the “light”¹ is by

¹ *Light*: an opening for the admission of daylight, or, less universally, of air as well. The space horizontally between two mullions or upright dividing bars, or vertically between two transoms or horizontal bars, or the transom and the sill, or the sill and the window head, vertically, is a light, but the whole space of the window is a light if the window is without fixed divisions, such as mullions or transoms.

means of lead sash-bars which have a generally I-shaped section, the grooves on each side between the flanges holding the piece of glass and the soft lead allowing of this hold being sufficiently close and tight. This sash-bar can be bent easily, and the soldering of one piece to another can be made firm. In this way the most elaborate patterns can be made with but a reasonable weight of lead; but the most refined modern work depends largely upon its leading for its effect, and more than is essential for permanence may be used in this way. It is practicable to mount one lead upon another, or the leads may be made with two grooves side by side in the thickness of the window, this arrangement in their form being for the sake of what is known as plating, namely, the lining of one piece of glass by another for obtaining a color not otherwise to be got.

Mediæval windows in Europe were not often treated with exclusive reference to their effect as pieces of mosaic. It was rather the custom of the fourteenth-century artists to partly disregard the conditions of this work as a decorative composition in stained glass held together by leaden sash-bars, and to treat the whole thing as a picture which, by means of the opaque painting mentioned in Chapters V and XX, could be treated, between mullion and mullion throughout the whole surface, as a single composition. Even from jamb to jamb of the window, disregarding the one,

two, or half a dozen mullions which might divide it horizontally into different lights, a single composition might be carried out, the picture being treated as if it existed complete behind the mullions, which appear as hiding a part of it merely, and not as dislocating it and separating it into parts pushed away from one another by the thickness of the mullion. The propriety of this is of course obvious. The mind can conceive an angel's wing being partly concealed for a space of six inches in width where the stone bar comes, but can hardly imagine the wing cut in two and shoved one part six inches from the other.

Modern work goes further in the direction of a pattern produced by leaving the colored glass visible in patches left by painting out the background, unless it has been conceived in the deliberate following out of the mosaic idea. It is that idea which has made the artistic success of what is known as the American method in stained-glass work, a fact which is worth insisting on in view of the very small number of artistic successes of which as yet the United States can boast. The peculiarities of this method are, first, the insistence upon the glass, the pot-metal unaltered by painting, as the beautiful thing, its beauty to be enhanced by the combination of color with color, tint with tint; second, the investing of the glass with the opalescent quality as described in Chapter IX, which quality is found to make it much easier to har-

monize the color design ; third, the insistence upon the lead sash-bar as a very important dark background to the brilliant figure composition, flower pattern, or landscape effect, this background being comparatively small in the space that it occupies, but very positive because of its opacity, in contrast with the brilliant translucency of all the surface of glass ; fourth, as a necessary consequence, the almost complete exclusion of opaque painting, and the substitution for it, where gradation must be got more subtile than the glass itself allows, of enamel painting, that is to say, of painting in a material only a little less translucent than the glass upon which it is applied. This last-named principle, number four, has hardly reached perfect development as yet (1903). The faces and hands of a draped figure are noticeably different in quality from the unpainted glass around, and this even in the finest work. In other respects this system of translucent mosaic has produced admirable results, and it is equally admirable in designs studied after the purely decorative windows which existed, though they were rare, in the thirteenth and fourteenth centuries, and in figure subjects drawn according to the modern way of looking at the figure and the modern way of casting the drapery. Nude subjects are of course less well calculated for good effect in glass work. It is hard to say how any selection of the glass itself can suffice for the extremely subtile flesh tints which invest the body

in full daylight. On the other hand, some attempt has been made at producing colossal heads by means of leading alone, and without painting even in enamel colors. If a head is three feet high from chin to brow, there is room enough to combine selected pieces of glass which by their continued gradation and their contrast may sufficiently represent the natural modelling by light and shade and color, while the very thin leads used do not injure this delicate modelling of the surface, contrasted as they are by the very strong and broad leading of the outline, not of the head alone, but of the ear, the locks of hair, the under side of the nose, and wherever a relatively strong line of shade may be thought admissible.

The purpose of decorative windows being largely to give to those within the church or hall a feeling of being enclosed while yet the daylight enters freely, the sixteenth-century device of uncolored glass, imperfectly transparent, and leaded up in a mosaic of simple or elaborate forms, is to be avoided where the general system of stained glass is in strong color. On the other hand, such glass used by itself as in passage-ways, lobbies, minor apartments of any sort, may be extremely effective, and from the sixteenth century to our own time it has been used under the name of *grisaille*.¹ There

¹ *Grisaille*: In French, something gray, especially a design in light and shade, black and white, or in monochrome generally. Its most common use is to describe windows of decorative design but without color, and

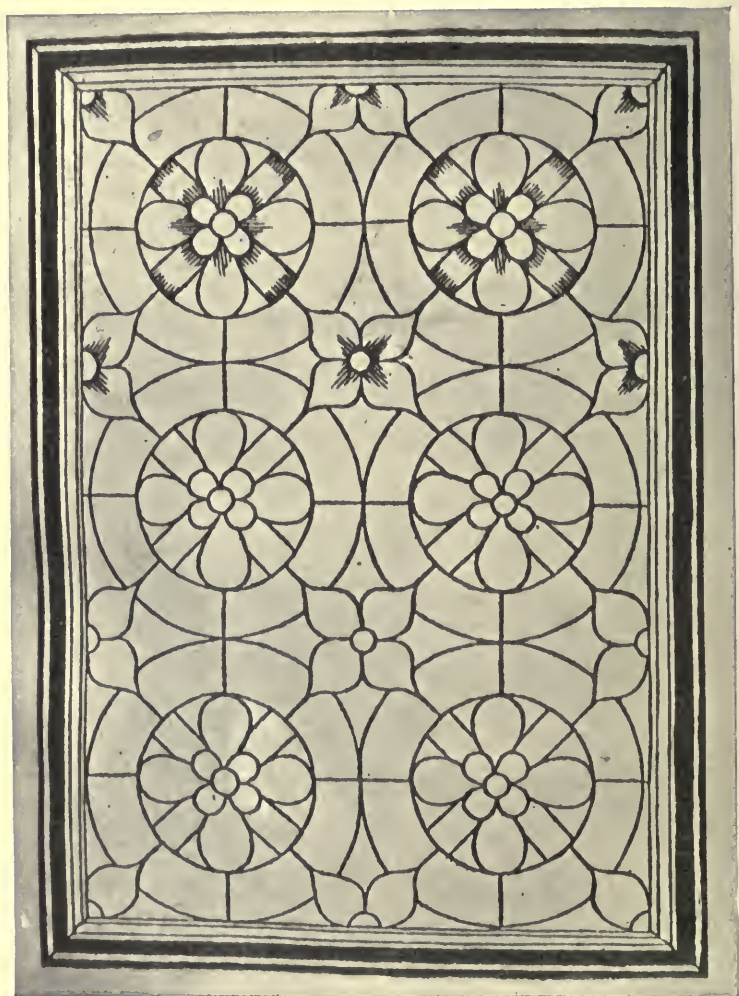


FIG. 139. Design for window in grisaille
(From "A Booke of sundry Draughtes," 1615, printed in fac-simile 1898)

are old books of patterns for such windows which have been reproduced in modern times, as seen in Fig. 139, which reproduces such a design. This shows the leads in the simplest hexagons and triangles, and again in complicated patterns of flowerlike origin, fleurs-de-lis, anthemions and the like; and these suggest the limited and careful use of small patches of glass with some more decided color to set off and enliven the grisaille. The richer windows of this sort are adorned also with purely decorative purpose by what are known as jewels, that is, castings in glass of brilliant color, which, having a rounded shape and projecting above the surface, refract brilliantly the light and make vivid spots of color.

decorative painting in which some suggestion of relief is given without color effect.

Chapter Nineteen

ENGRAVING¹

ARTISTIC engraving has two main divisions: first, that which seeks the ornamentation of a surface, as of a silver vessel; second, that which provides for the taking of prints by means of ink applied to the engraved surface and afterwards transferred to

¹ *Engraving*: the practice of cutting lines, and small spaces usually connected with lines, in a hard material; the material being cut away or removed, usually by tools especially made for the purpose. When the engraving is in the surface of metal, as copper, the rejected metal forms curled shavings before the burin; or is turned up like the ridges of a plowed field when the "dry-point" is used; or is eaten away by the mordant in etching. When stone is engraved, the matter cut away is in the form of small chips, sometimes so small as to make dust; or, in drill and wheel work (see Chapter XXI) in an impalpable powder. Engraving in wood leaves small chips and shavings, according to the tool employed. In every case the essential characteristic is that the material is cut away. The most common form of engraving is that in which the incised lines form the pattern or other design which is sought for. There is, however, one form of engraving in which not the incised line but the undisturbed, unaltered surface of the material is the object looked at by the artist. The most common type of this is wood engraving, such as is used for printing illustrations in books and the like. It is noticeable that cameo-cutting is similar in character to this process, which may be called relief engraving, that is to say, engraving which results in the production of relief, and not in the production of an incised design. (Compare Intaglio and see Chapter XXI.)

paper or other material. It is obvious that the two processes are closely akin in their artistic significance. Thus, as the impression upon the paper may be trusted to be a very close reproduction of all the lines engraved on the surface of the metal plate, it appears that the design which the artist had in mind as he worked will be found again in every one of the impressions so made. On the other hand there is found to be this difference, that the impression on paper, the print with which we are all familiar, shows as if drawn in black on white, whereas in the original the effect is different and is sometimes nearly reversed, bright lines on a dark ground; because the incised lines have a peculiar gleam caused by the sloping sides of the cut. It is so difficult to sink a narrow canal, having at the bottom a flat surface with sides making nearly a right-angle with the original surface, that the cut made by the engraver has nearly always sides sloping inward in the form of a V (but see what is said, below, about damascening). In the case of the incised letters on a marble slab or block, a form of engraving known to all students from its constant use in lapidary inscriptions from the time of the ancient Romans to our own day, it is one of the means of producing decorative effect that the sides of the cut with their sloping surfaces catch the light and reflect it at different angles.

The differing effect of different slopes of the sides of the cut is beautifully exemplified in Oriental

work. Fig. 140 shows a metal plate in which are engraved some stems and flowers of grass, with a butterfly; and it is noticeable how the long leaves seem to show alternately their under and upper surfaces by mere variations in the width



FIG. 140. Engraved plaque, Japanese bronze, set in a half-ball of ivory to serve as a netsuke

of the incised line.

This little bit of realism is, however, a matter of course to a Japanese composition. What is more noticeable in the original is the peculiar treatment of the incised lines.

In some, the section is nearly rectangular, both sides of the depression being cut

straight down and the shaving taken out between them: while in others the section is that of a V of which one side slopes more than the other, so that the light is reflected from the long slope in a way productive of a remarkable decorative effect. Fig. 141 is the inside of the cover of a shibuichi box lined with silver; and here, while the play of light is less delicately considered, the contrast of dark and light is carried much farther; the design coming out like a drawing in black on white, with the added flash of the sloping sur-

faces of the cut in solid white metal. In this way are got intensified contrasts, and a brilliancy



FIG. 141. Engraved silver lining of box-cover three and three quarter inches long: Japanese work, eighteenth century

unobtainable with ink and paper. It is noticeable how completely this assumes all the qualities of an elaborate scheme of light and shade, and

that within a space about three inches by four. Similar work done on rounded surfaces, as of a copper kettle or a costly bronze vase, is often still more effective as pure chiaroscuro, but it is difficult to show this in a photograph.



FIG. 142. Engraved silver sheath of Japanese short sword: reduced to one half

There is still a further step which may be taken in decorative engraving: and for this also we must go to Oriental art. Fig. 142 is the silver sheath of a *wakizashi* or Japanese single-edged dagger. In the branch of flowering plum-tree, the knotted, scraggy, and discontinuous character of the woody stem, always insisted upon in Japanese art, is expressed by incised lines so varied in width and depth that the actual stem seems to be left in relief upon a sunken ground. And this is exactly the tendency of all elaborate decorative engraving; it leads directly into concavo-convex sculpture. Compare what is said in Chap. VII of poker-painting and other forms of drawing.

Such a V-shaped cut, if small, may be trusted to take and hold

ordinary filling, as of mastic in stone-cut inscriptions or niello in silver (see below), but when it is proposed to force metal wire into the groove, even if the wire is of soft pure gold, the cut has to receive such a section that the harder metal of the piece will hold the insertion firmly. This is done in the preparation for damascening; the cut in the iron or bronze receives a dove-tail section. (See the definition of damascening and Chapter XVII, also Chapter X.) The difficulty of preparing the groove of this shape, and the farther uncertainty of the holding fast of the metal when hammered in while cold, tend to limit damascening to tracery of slender lines, whereas niello work may employ much wider and more irregular surfaces.

The engraving on the box (Fig. 141) has been colored; all the incised parts stained black by some device familiar to silversmiths. If, now, the incision were filled up solid, flush with the surface of the metal, the design of the engraver would approach in character a design for incrustation, for which see Chapter XVII. But this filling, or incrustation, if it is black, will probably be what we call niello (see Chapter XVII), and the decoration of silverware as well as the making of small pieces of church furniture almost wholly for the display of niello pictures, is as common in fifteenth century Italian work as similar ornamentation is in modern Russian card-receivers and cigar-cases (see

Chapter XVII). In fact, niello has not been treated with the respect which it deserves. There are, indeed, silver goblets and dishes of the fifteenth century which are splendid decorative pieces, but it does not appear that the masters of metal work have ever cared much for this accessory of incrustation of black on white.

If now we should cover with printer's ink the bronze disk, Fig. 140, and dab it or roll it hard, so as to force the ink well into the incised lines, and then wipe the smooth surface clean, we could take an impression on a piece of wet paper which would be a close reproduction, reversed, of the whole pattern so far as it is a matter of sharp-edged cuts in a smooth surface. The other part of the design, — the carefully prepared play of light on the sloping surfaces of the incisions, — would disappear, of course. It follows that the engraver for printing thinks only of narrower and wider lines, smaller and larger dots. He composes in flat black alternating with flat white. This is enough for him, however, for the effect of gradation is obtained at once by breaking white into black and black into white, and no man's genius has been sufficient to exhaust all the possibilities of such work. The play of light caused by the small and sometimes almost invisible white spaces left between black lines or interspersed through generally black surfaces, and the opposite but kindred effect of thin and thick lines of black breaking up surfaces of

white, have a charm which is never exhausted. It is, in result, like a drawing in line, but with the added charm of greater intensity of effect, because the lines cut in the metal are finer or broader, at the pleasure of the artist, than pen-drawn lines can be; and, in the print, the ink has a strong and somewhat brilliant black. No draughtsman could copy with entire success a fine print by Albert Dürer, or a part of it, such as the shading of the nude figures in the Adam and Eve; nor would it be easy to maintain with any drawing tool a touch which would give lines much more than a sixteenth of an inch in width, as are those in the foreground of Haden's etching after Turner, "Calais Pier." The way of printing from the plate is also an important factor, but for this see Chapter XXIII; as for the "burr" of the dry-point, that also is an important accessory, and is considered below, in the description of the different processes.

Prints from engraved blocks of wood, or from engraved boards,—for in ancient wood engraving it was the side of a plank that was used and not the end grain,—have been known in the Far East for a great length of time. In Japan they have been utilized for purely artistic purposes for two centuries, and this with the most admirable results. In Europe such prints from wood blocks date, perhaps, from the twelfth century, and the often cited "books of the poor," *Biblia Pauperum*, were

printed, each page from a wood block as large as the page itself; lettering and pictures all together, the wood being cut away from the surface intended to take the ink, which is thus left in slight relief. Prints from engraved metal plates date from the fifteenth century, for although engraving is much more ancient than that, and although the early workmen must have rubbed off impressions to judge of the progress of their work or to preserve a record of what they parted with, it seems to have struck no one that this was capable of artistic development. The art of niello which is treated of above and in Chapter XVII became very fashionable in the fifteenth century; and the general opinion as to the discovery or invention of the paper print from engraving is that workers upon silver plates, intended for filling with niello, had occasion to take off trial proofs, and in this way to notice the effect of printing from their incised plates upon soft surfaces such as paper. Ink or pigment of any color, if mixed to a certain pastiness, will be held in the lines of an engraving in such a way that when dampened paper is pressed strongly upon it the ink adheres to the paper in a sometimes visibly projecting ridge. The whole interesting history of engraving for prints and of the study and collection of prints depends upon this, and the wonder is that this history is not yet five centuries old.

The incised line can be produced on a metal

surface or on glass, which occasionally is substituted for metal, by means of acid which corrodes or, as we say, eats away the metal very readily. In order to produce this effect and to limit the acid to the line which it is expected to eat, the surface of the plate is covered with some substance which repels the acid, usually called the "ground." This is applied before the lines are made, which are then cut through the ground and perhaps a little way into the metal by means of any hard point. Anything will do; "an old steel fork" is cited as in use by one very great artist who etched sometimes, but the favorite is a rather heavy little steel bar, like a stout lead-pencil, which is usually called an etching needle. The point may be sharpened chisel-wise, so as to cut very fine lines when held edgewise; and points of other and very peculiar forms are used by some etchers. The plate once plunged into the acid can be withdrawn at pleasure, and certain lines can be closed up or "stopped out" by means of varnish or any other material which can be put on with a brush and which will repel the acid; and in this manner the depth and therefore the width of the lines can be determined, for the acid eats a little way on each side of the exposed line, and also eats beneath the surface so that the sharp edge of the metal gives way. In some modern etchings the line so produced is deep and wide, and the resulting ink line on the paper is really

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a ridge of measurable width and height. Work done this way with the sharp point followed up by acid is called etching.



FIG. 143. Etching by Antony Van Dyck : Portrait of Jan Breughel

The process above described is often the only one employed on the metal plate, though it is quite feasible to complete the etching after the

ground has been cleaned-off by fresh lines cut in the bare metal. Such work as this is called dry-point work, when it is mere scratching with the needle. Etching, however, is used very largely in the preparation for a burin engraving, the metal plate being covered with ground and the whole design traced upon it with the needle, and impressions taken on paper from this for the guidance of the workman while he is handling his burin.¹ Fig. 143 shows one of those famous etchings by Van Dyck which were prepared for a collection of portraits of the famous Dutch painters; the plan being that Van Dyck himself should etch the heads, while engravers (generally far less independent and original) should put in clothes and background. The head shown in Fig. 143 is that of Jan Bruegel, or Breughel, the painter known as "Velvet Breugel." It appears that the same hand drew the head, the hand, the ruff, and sketched the shading of the garments; but the background is more doubtful, and is probably the first working on the plate of the mechanical line engraver who was to complete the piece.

In Line Engraving the artist cuts or ploughs the lines directly into the metal with the burin,

¹ *Burin*: a tool used for cutting grooves in metal, usually having a blunt, square end in place of a point, and a very sharp edge reaching to this blunt end, so that what cuts the metal is the pyramidal point produced by two sides of a prism and the blunt end itself. It is used as a plough is used, pushed point on, throwing up a shaving of metal before it.

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before which the metal, — usually copper more or less alloyed, — curls away in little shavings. The



FIG. 144. Engraving by Hendrik Goltzius (d. 1617)
Portrait of Henry IV of France

difference between such work as this, slow and deliberate, and the swift work of the etching needle, will be readily understood. These are

indeed the two extremes of the engraver's work as a draughtsman, the drawing in one case being the rapid synthesis of previous observation, and, in the other, the slow elaboration of the scheme which, although it must be laid down in advance, is in detail developed only minute by minute as the slow tool cuts line after line. The necessity of prints being taken from the preliminary etching as described above is evident here. Without such a memorandum of his first conception of the task the engraver would invariably lose hold of his theme and would develop one part of the work far beyond, or let it sink in interest far below the earlier parts.

The two processes, etching and burin-engraving, however different in character, sometimes resemble one another in result. Some noble works of engraving known to us only by the prints taken from them are a puzzle to students, the doubt being as to how far a fine graver was used instead of and in the same way as the burin, and how far the etching needle itself has done the work. This doubt exists in respect to some of Albert Dürer's important engravings. That print which is by almost universal admission the finest in the world, the wonderful head of the Emperor Maximilian by Barthel Beham, is produced by means of dotted lines or at least lines which are far from being uniformly continuous. Fig. 144 shows the famous portrait of Henry IV of France, the one known as

“With the Orders” from the collars of *Saint Michel*, and of the *Saint Esprit*, which the King is wearing. It must be a never answered question, whether all the thin, black lines shown are printed from cuts by the burin; even if we accept the idea of a very different tool and a different touch from those used in Fig. 145. That print is the work of the great originator of the later school of line engravers, Robert Nanteuil. Here, all is regular and exact; the lines cut in the copper are accurately parallel, and softness of modelling and gloss of surface are got by varying the thickness of those parallel lines, as also by the insertion of other lines between them in a very precise and measured way. There are fifty years between the two pieces of work; but there is a wider space of sentiment and purpose.

There are other processes in use in engraving which rather tend to produce gradations of surface than lines however varied in character. Of these surface processes one is aquatint,¹ the other mezzotint,² and from each of these a print can be obtained

¹ *Aquatint Engraving*: that which is done by means of acid spread over large surfaces of a metal plate. In this case the varnish is put on with greater or less thickness, or having been put on is scraped away more or less so that the acid finds a way to the plate through the minute openings or thinnest spots of the varnish.

² *Mezzotint Engraving*: that produced by the scraping away and smoothing of a previously roughened plate. The metal, perfectly smooth and polished, is taken in hand by the artist or by a wholly trustworthy assistant who passes a steel “rocker” over the plate many hundred times, and in at least four directions, as horizontally, vertically, and along

giving the most subtle and delicate as well as much darker passages, with perfect success, while mezzotint gives the softest extreme dark producible in graphic art. The difficulty with these processes is the extreme perishability of the plates. A mezzotint may be said to be never in good condition after the first few impressions have been taken from it. All attempts at renewing and partially re-engraving it, are so far objectionable that they inevitably change the character of the plate so that the prints worked off after the repairing has been done are different in character from the prints made previously.

When the engraver proposes to carry out on a metal plate a design for printing, and to use for his work the burin, whether or not he makes a slight etching upon the plate to begin with, he is undertaking a piece of line engraving.¹ Work done in this way requires a long apprenticeship. Line engraving is a trade, slow to learn and difficult to practice, differing very much in these respects from etching and dry-point and even from

two diagonals. A surface so roughened and consisting of an indefinite number of minute points with depressions between them would, if inked, print off a solid velvety black. The artist then attacks this surface with graters and burnishers, and cuts away the points more or less deeply, — those passages which are to be entirely light being cut away to the smooth metal, which is even polished in places so as to take no ink at all.

¹ *Line Engraving*: the art and process of engraving with the burin; in French, *gravure au burin*, or in popular writing, *gravure en taille-douce*.

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mezzotint. The engraving of a large plate, as the copying of one of the modern paintings in a



FIG. 145. Engraved portrait of a physician by Robert Nanteuil (d. 1678)

public gallery, requires months of time. There results from this a tendency toward mechanical
[386]

accuracy in all burin work, and a further tendency toward the following of tradition for the sky, the clouds, the thick foliage of trees, foreground, drapery, and flesh. Burin engraving is, therefore, a good deal disregarded by artists since the middle of the nineteenth century. This indifference to the process is so far justified that much the greater number of burin engravings have been copies of paintings or drawings; that is to say, reproductions of other men's work; and very often untrustworthy even as black and white copies, and hence generally disregarded by students of the original, whereas the artists who have worked in other ways upon the metal plate have been more often led to engrave their own thoughts. The act of translating the work of color, as an oil painting, into the language of black and white, is entirely worthy of artistic labor; but the demand, during the seventeenth and eighteenth centuries, for large plates copied from the celebrated pictures of Europe, led to that mechanical and largely non-artistic method alluded to above. The impatience of modern workmen would generally prevent the undertaking of an original work in line engraving.

On the other hand, prints which are generally thought to be taken from etchings, may often be found on examination to betray a considerable amount of burin work done upon the plate after the etching was completed. There are, indeed, some artists of recent times whose famous plates

seem to have been produced by a deliberate mingling of the two processes. Charles Méryon (d. 1868) is known to have used the burin in completing his etchings of old Paris. Ferdinand Gaillard (d. 1877) is hardly called an etcher ; he is ranked as a painter-engraver, whose work is assumed to be line engraving, yet, when considered as line engraving, his important work exhibited in 1863 was refused, and in 1866 was hung high and disregarded, apparently because such minute and delicate work could not be accepted as burin engraving, which, however, it pretended to be. Beraldi, in his notice of Gaillard, shows positively that he was a burin engraver and nothing else, his work being different from that of other line engravers only in its minuteness and in its masterly originality. The large plates issued by the *Chalcographie du Louvre*, exhibited during the years from 1895 to 1900, seem to reveal a rather free use of the etching process, not merely for the preparation of the plate, but to be preserved as part of the design.

The artistic conception and the artistic method of work in a piece of line engraving are, therefore, not wholly different from the same things in an etching. Etching¹ has been called especially the

¹ *Etching* : engraving by eating out the substance, as by acid, so as to leave incised lines in metal or glass. It is necessary to cover the surface with some resistant material, such as varnish, and the lines are cut through this with a sharp point, allowing the acid to attack the surface below.

artist's process ; but when it is considered in this way dry-point¹ must be taken with it. In both these processes the workman holds a kind of pencil with a hard point, and with this he draws, freely and naturally, as if he were using a lead pencil or a silver point ; the stroke quick or slow, the pressure light or heavy, the line thin or broad. One learns the conditions almost as readily as one learns to draw with pen and ink. The workman in dry-point cuts into the metal, whereas the same tool, when held by the etcher, may cut the varnish only, hardly grazing the surface of the metal. The difference in the result lies in the fact that the acid, if left long enough in contact with the metal, eats away the substance too much, leaving an incised line which is not sure to preserve the original width, while the rest of the surface remains smooth ; whereas the dry-point leaves a ridge on one side of the furrow while it cuts. Now this "burr," or ridge of dry-point work, is greatly enjoyed by artists, whereas the treacherous "rotten" line of an overbitten etching is to be avoided. This may be the way of work, then ; the artist, unless

If the varnish is smoked, this is merely to show more clearly the lines as they are made, for they come bright on the soft black ground. The plate is then plunged in the bath of diluted acid. It can be withdrawn and some of the lines "stopped out" with varnish, and the plate returned to the bath. See description p. 379.

¹ *Dry-point* : the process of engraving with a sharp point, held freely, as a pencil is held, so that the workman makes scratches, and does not plow slow grooves. The point turns up the metal on one side, like the ridge of a plowed field, and this forms the burr.

a past-master in the technique of etching, may well leave his plate insufficiently bitten, — may clean it off, and finish it up with the dry-point. It is not necessary for him to utilize the burr of the dry-point work. That can be removed by the burnisher, as indeed has to be done in finishing a line-engraving. Consider, for instance, Fig. 146, Rembrandt's etching (Bartsch 368), three female heads. There is no evidence, which can be perceived perhaps by any student, of the use of the dry-point. All may be the result of pure etching. At the same time it would hardly do to say that there is no dry-point work at all. The name "Rembrandt" and the date look as if cut sharp on the copper, and if that is so, why not some of the shading on the background?

Compare with this print that from a copper by Aldegrever, the portrait of Albert Von der Helle, Fig. 147. This is pure line engraving; and the student enjoys each of these prints for its own merits, the older one for its simple straightforwardness, every part and detail rendered according to a convention which required that things should be drawn minutely and slowly, seam by seam, plait by plait, curl by curl; while the Dutchman's work of a century later is for the general look of things only, and even that only within sharply defined limits. He asks for the most important thing — expression of face — and then chiaroscuro, the beautiful harmony of grays which nature provides



FIG. 146. Etching by Rembrandt Harmensz van Rijn (d. 1669)
Study of heads; dated 1637



FIG. 147. Engraving by Heinrich Aldegrever (d. about 1562),
portrait of Albert von der Helle, dated 1538

and which man can reproduce by forcing it a little. For all else, it comes of itself to the point of such a master's pencil. Note how the artist has made his memoranda of plump cheek and over-plump chin; of the hand carrying the weight of the sleeping head; of the black hood trailing loosely on the shoulder; and then trace, as you easily can, the touches by which those effects have been produced.

In each of these conceptions there is sought and found a fresh and original design in black and white. The wide divergence in their character contains a sound lesson in judging works of art.

Chapter Twenty

PAINTING IN FLAT WITH STENCILLING

NEARLY all the painting that has been done in this world is flat ; that is to say, without any kind of gradation,¹ a matter which is considered in Chapter XXV. A few square feet of canvas and of paper in easel pictures and in drawings, and a few square

¹ *Gradation* : the gradual passing of one tint or one hue into another by invisibly slight or untraceable changes. Thus the clear noonday sky gives a gradation from deep blue to a blue so faint as to be undistinguishable from white, which is a gradation of one hue ; and a clear evening sky will often give a gradation from blue through white to red or reddish yellow, which is thus a double gradation. The spectrum of the prism is a continuous gradation from deep purple through blue, green, yellow, and orange to pure red, and we may classify three or seven or a dozen different hues there, as the passing from one to another is not traceable.

So in an artistic drawing in Chinese Ink ("India Ink"), Bistre, or Sepia, the slow change from white paper to the deepest black or brown is obtained by means of a wash, with which the artist mixes continually more and more pure water. The gradations of oil painting are got by continually adding more and more of another pigment to the one used at first. It is for this that the palette is necessary, with its array of little mounds of moist color ; the brush goes continually back to these mounds taking more and more white (for instance) to a blue, so making the gradation on the canvas from deeper to paler blue ; or to yellow, making the gradation from pure blue to green, and so on till blueness disappears.

The awkward verb "to gradate" has been made from gradation, and this verb and its participle "gradated" are used by Ruskin in "Modern Painters," and by other writers on art.

yards of plastering in mural paintings, indeed, have been, and are annually covered by color applied in gradation by hue¹ or by tint² or both; but this amount is as nothing to the acres of surface of stone, stucco, plaster, wood, and stretched paper, upon

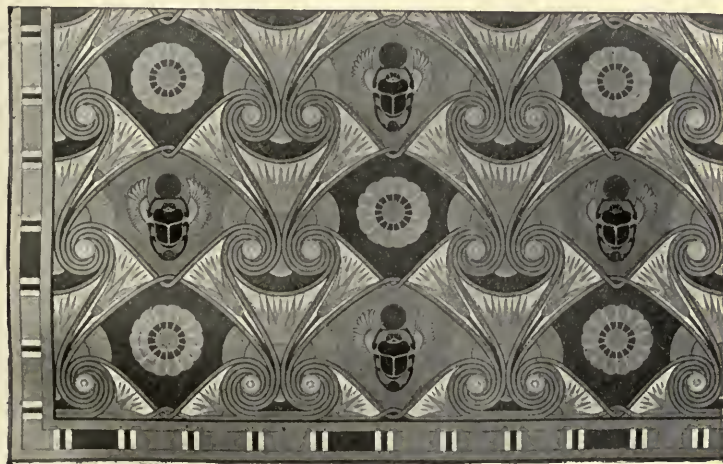


FIG. 148. Egyptian mural painting

(From Prisse d'Avennes, "L'Art Egyptien")

which color has been laid in the form of flat, uniform, ungraded painting. Thus when, as in Chapter

¹ *Hue*: the characteristic color-quality. Thus the "soft" or "cool" blue of some Chinese silks comes of their being greenish, and their hue is greenish blue, while the hot blue of some European silks is really a deep purple, and its hue is purplish. The hue of Chinese porcelain painting is generally of a cooler blue than that of Japan.

² *Tint*: the darker or lighter, purer or less pure, state of a color. Thus, if we take white lead mixed with vermilion, and lay it on wood-work, and then touch up the red so produced by a lighter red, made by mixing more white with the vermilion, we are using a darker and a lighter tint.

V, the painting of surfaces of plank and plaster is found to be quite independent of skill in drawing, it is also found that effective contrast and harmony is obtainable by the mere application of color to surfaces previously settled and fixed. The color, too, is previously settled and fixed; a potful of this red or of that buff is mixed, in advance, and this paint is applied flat, in a skilled, mechanical way.

This flat work is often extremely interesting, and of high artistic quality. Thus in Fig. 148, taken from the great work of Prisse d'Avennes, whose drawing of such things, it is admitted, is trustworthy, we have a ceiling of the Eighteenth Dynasty, and of about 1420 B. C. The design is of scrolls which enclose lotos buds and winged scarabs of imaginary form, but all is in flat colors, as follows: dark green, two paler greens, dark red, lighter red, yellow, and white. Fig. 149 gives a panel from a tomb ceiling of the Twentieth Dynasty, and these wild geese are all painted with flat hues, which are even fewer than those of the more conventional design.

It will be seen in these plates that there is nothing to prevent the laying of one coat of flat color upon another coat of a kindred or of a totally contrasting hue. The pigment which is superimposed will be often entirely opaque, so that it will not be affected by the under coat; but if the upper coat of paint is partly translucent, the painter easily

ACTION OF COLOR UPON COLOR

learns exactly the hue which he needs to prepare, in order to allow the hue underneath it to affect the upper one. A pale green will be made somewhat deeper if laid upon a solid, bright blue.

The near proximity of a strong color will also affect other hues; thus vivid blue alters all the



FIG. 149. Egyptian mural painting
(From Prisse d'Avennes, "L'Art Egyptien")

colors near, tending to make yellow look greenish and dull unless a little metallic gold is used to restore the harmony. It is generally understood that certain colors go well or ill in juxtaposition, not alone because they harmonize, but because the presence of each one changes all the others, and this change may or may not be advantageous.

So, from what we know of the painting of Greek buildings, the columns of a peristyle¹ might be

¹ *Peristyle*: a row of columns connected with a building, either running along one side or several sides of a court; or, when on the outside of

painted a dark color, perhaps red, up to a height above the heads of the passers-by. The capitals of these same columns would then be painted in far more elaborate fashion, with perhaps a fret¹ on the abacus,² or a series of large conventionalized leaves on the bell;³ and these patterns on the capital would require a man who had some practice in drawing. The most important painting, however, was that applied to the sculpture, and there it is evident that the two workmen, he of considerable artistic feeling and he with none at all, but with mechanical skill only, might work together, the one painting all the corselets and greaves of the dusky blue chosen to represent steel, while the

a building, enclosing the whole, or nearly the whole of it; or as distinguished from a portico which may face one end only of a building, or be so small as to cover merely the entrance; or, finally, may be separate from the building and afford a sheltered passage by itself. Thus, buildings such as a certain number of Greek and Roman temples which are surrounded by columnar porticos on all sides are said to be peristylar.

¹ *Fret*: an ornament made of short, straight lines forming angles with one another, usually right angles. The fret is more usually a single band of such combinations of straight lines, and is then called a meander, or key, but it may cover large surfaces, as when a grating for a window or the like is made ornamental, but still by the use of the straight line pattern.

² *Abacus*: the flat and relatively thin slab which forms the upper member of the capital of columns. This in the Grecian Doric style is plain and square edged, and thick enough to require some painted decoration on its edge.

³ *Bell*: that part of the capital which is between the abacus above and the necking below; that part which receives sculpture in many styles of architecture, and is smooth and painted richly in Grecian Doric, as in most Egyptian orders.

other would put in those parts of the composition which were not rendered in sculpture, or at most only blocked out and rudely shaped by the chisel. This distinction exists in the famous frieze of the Parthenon, where there are certain details of the composition which were evidently non-existent in the bas-relief, and to be put in only by the painter's brush. In this respect the painter came in, as the bronze worker did, to put in the final touches at the last moment, — the details of dress and personal ornament. See, however, Chapter XXIV.

This superimposing of colors allows of a remarkable play of apparent form. Thus, if we paint a pattern of leaves arranged with their stems in a kind of scroll, it is easy to paint upon the flat green surface which stands for the leaves, lines representing or suggesting their mid-ribs, and some of the minor ribs or of the veins. Again, a short curved line or two at each sinus may express some of that relief or slight projection which is common to leaves, and which is so important an item in the beautiful, natural effect so strongly impressed upon our memories. Fig. 150 gives such a band of leafage, after a frieze in the Cathedral of Reims, which seems not to have been changed since the thirteenth century, having been kept out of sight and untouched, in consequence of an early condemnation of the doorway where this frieze is painted. It will be noticed that the effect is

nearly that of leaves painted with color in gradation. It will be noticed also on further examination that there is no modulation in the color in either sense, either by changing the character of the color gradually, or by diminishing or increasing the amount of white. Where, at the edge of a darker passage in the coloration, there is seen an appearance of gradation, it is



FIG. 150. Painted frieze, Reims Cathedral, thirteenth century

(From Gailhabaud, *l'Architecture*)

caused by the working of the darker, superimposed color into small touches and broken lines; or, as in the lighter leaves which sheathe the stems at the parting of the members of the scroll, it is done by over-laying color twice, a light blue upon white and darker blue upon the lighter blue. In this way and in similar ways an appearance nearly like that of complete gradation of color is obtained with flat painting only.

When a considerable surface has to be adorned by means of color, it is customary to use the stencil or stencil-plate (see note to Chapter V).

In Fig. 149 a stencil might have been used for the wild geese of each peculiar design to give the general form of the creature; another stencil for the four red patches, of which two terminate the wings and two form the legs; a third stencil for the two gray patches, a fourth for the dark yellow patches (these two colors also decorating the wings and body), a fifth for the blue head and neck, and a sixth for the nearly black lines and dark touches indicating feathers. There is nothing to prevent the use of six different stencil plates in this way on the same unit of pattern. There is again nothing to prevent the artist from attacking his work "free-hand," and touching it up to any extent, reinforcing outlines, strengthening the color in places, and, as is seen in the heads of some of these wild geese, giving a deceptive appearance of gradation by just such methods as we find to be in use in Fig. 150. These methods are all in common use to-day. If it be the reader's business to decorate a room at small cost, and yet according to a wholly original pattern, he need go no farther than to paint the lower part of the wall in oil color, the paint forming thus a dado of some resistant surface, and the upper part of the wall, with the ceiling, in calcimine¹ (these in flat, dead coloring), and then to consider the stencil patterns which he will put upon the flat

¹ *Calcimine, Oil Painting*: for these terms see notes to Chapter V.

surface. Let us suppose that his wall is buff and his ceiling a pale grayish blue, while the dado is a very subdued brownish red. Above the dado he may draw two lines or narrow bands of the same dull red, or a broader, upper band of this red, and a narrower one below of black a little modified by admixture of red, leaving a narrow but still wider band of the buff to show in each space; or else, by making one of these yellow bands much wider than the other, he may include in it a row of red disks, each of which may have a black or dark brown circular spot occupying the centre; or a sequence of five red dots and then a black one, and so on alternately. Upon the wall he may set a *semé*¹ of patterns, each unit of pattern very simple in outline, as, for instance, composed of a small disk surrounded by five larger ones. The color of these disks may be a pale blue akin to that of the ceiling, but somewhat more intense, on account of the small surface which it occupies. As for the ceiling, much will depend upon the mouldings in plaster which surround it or cross it in different directions. These mouldings may be "picked out" in several different hues or in different tints of the ceiling color. It may be well to carry this plan farther, and to

¹ *Semé*: literally a sowing; a surface decoration made up of separate figures regularly placed; there may be one figure constantly repeated, or two or more figures. A *semé* differs from a *diaper* in having the units of the pattern wholly disconnected.

paint some of the parallel mouldings of each group with small patterns which contradict, by their bounding lines, the general lines of the moulding, as an egg and dart,¹ or a leaf pattern is used in Grecian architecture. See Fig. 151, in which are shown seventeenth-century patterns from a fine old private house in Paris. It is not

best to make the ceiling as strong in color as the walls, and therefore it will not be advisable to put any pattern into the panels or flat parts of the ceiling when the walls



FIG. 151. Painted mouldings of window head, Hotel Vieuville, Paris : seventeenth century

(From Gélis Didot)

are simple, as is here assumed. All this work is supposed to be done by the use of stencil-plates, except where the mouldings of the ceiling are painted in different, slightly contrasting hues ; that work being quite easy to any skilled mechanic who has learned his trade as a painter.

The above instance is chosen deliberately as about the plainest work possible to have any

¹ *Egg and Dart* : called also Egg and Anchor ; having the character of flattened balls or ovoids alternating with sharp-pointed members, arrow-heads, or the like,

decorative effect at all. It is easy to see how very much this may be enriched by a slight additional outlay in the way of superimposing flat painting, either by different stencil-plates or by retouching in small lines, drawn parallel, or by points or dots. It is difficult to give any idea, in small illustrations, of the real effect of mural painting. The most elaborate patterns of inlay and of mosaic (see Chapters XVII and XVIII) are more simple than those which may be stencilled or otherwise transferred mechanically by means of painting, the original design only being most carefully executed of the full size. These patterns will often require the use of superimposed stencils to produce the leaf-like effect of the somewhat rich design, such as may be suggested by French wall painting of the time of the Renaissance—Henry II or Charles IX. Fig. 152 shows painting of arabesques applied directly to the panels of dark red wood,—examples taken from that great château which the Duc d'Épernon built in Cadillac near Bordeaux. These are exactly what may be done with the best effect in pure flat color; and it is such flat color as that which is used at Cadillac, though the overlaying of colors may give a deceptive appearance of modulation.

In all this flat painting, it is noticeable that even very simple patterns have required, for the triumphant result which they show, a very con-

siderable skill in drawing; not that the lines are elaborate, the curves delicate, or that anything in nature is represented with greater or less knowledge and dexterity, but that the power of putting exactly the best line or the best stripe or zigzag or spot in a given place, and the power of combining a number of such simple units to produce an entirely successful design, are among the rarest powers given to the artist, and seem hardly to exist except where there is considerable power and skill of fingers, wrist, and brain. Drawing does not always imply the repre-

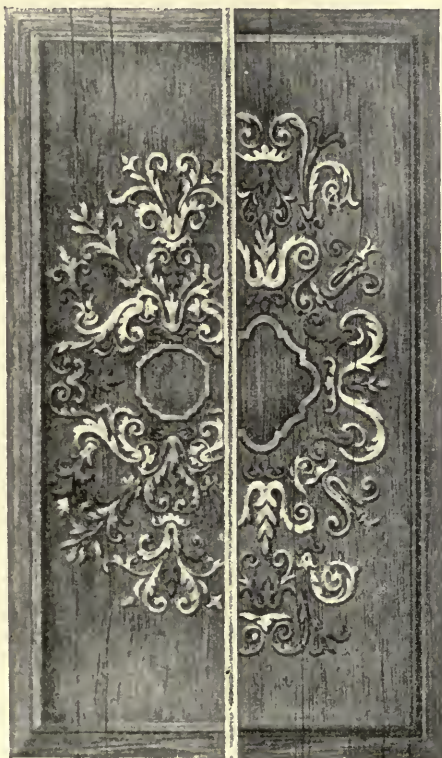


FIG. 152. Painted panels, Château de Cadillac (Gironde)

(From Gélis Didot)

sentation of anything (see Chapter VII). Drawing has been defined by artists of a certain conviction and tendency to be the art of putting the right thing (line, mass of color, mass of shade, or

the like) into exactly the right place for it; and this definition, which is assuredly a respectable one,



FIG. 153. Ewer, six inches high, of white glazed pottery

would cover much which is not generally looked upon as requiring great refinement of draughtsmanship. Thus a delicate little ewer of Persian

porcelanous Faïence (Fig. 153) is left in the speckled and imperfect white of its natural glaze, except for the flat touches of vitreous color, — dark blue, pale green, dull red, and vivid yellow. There is absolutely no manipulation of these colors; each separate touch is put on once for all and left to dry flat and then to be fired with the glaze, except for the use of the slight relief got by piling up the red pigment in stiff little balls which catch the light; and it should be noted that the use of such relief is a natural and obvious device of the decorative painter. It has its defects, whether in ceramic painting or in other forms of art, for the projecting masses are easily chipped off, as can be seen in the large pineapple-shaped pattern fully shown in the photograph. Nor is the reader to suppose that this is a mere pretence—that in this way gradation is got, though by other means than by the mixing of hues. The only appearance of gradation is that caused by the light playing on the uneven surface; and that has no effect in making the painting otherwise than purely flat. Now, the power of drawing involved in the decoration of this pitcher is of a very different kind from that called for in the antique schools or in the life class with the nude model.

The art which is involved in drawing a head perfectly well, whether in outline or in broad masses of color, is assuredly a vastly higher art

than that involved in putting these lines upon the cup, but each is draughtsmanship, and the simpler kind, not rare in the Orient, is as uncommon in the West, as merit in loftier styles of design. It is in constant requirement in color decoration of



FIG. 154. Painted box, Persian, seventeenth century A. D.

a, side of box. *b*, inside of cover

all sorts, and its comparative rarity in European lands is a daily hindrance to progress.

Now in regard to more elaborate color decoration, there is one branch of it but little practised in modern times and among European communities, which has been the very life of much of the finest chromatic designing in the world. The Persians are the masters of this art of conventional flower and leaf patterns, borders made up of such blossoms as have never been seen in any garden,

and medallions, panels, tablets of graceful form, combined with scroll-work and anthemions. All this nearly abstract design, based upon the forms of nature but still composed expressly for the border or surface which they are to adorn, is a special virtue of Persian work. Fig. 154 gives the side of the body and the inner face of the cover of a Persian box, of that make which we generally call lacquer-ware, though it is different enough from that which goes by the same name in Japanese art. The color effect is generally deep ruby red for the background and many hues for the pattern, but all in absolutely flat painting, the gold having a varnished look, as if foil of some "base metal" were preserved from tarnish by the lacquer laid over it. The Chinese do not compose abstract forms as well as the Persians, though they use natural forms, from humanity to the simplest leafage, with incomparably greater power. The Japanese are hardly inferior to the Persians in this, though their genius leads them, on the one hand, to a closer representation of nature, in which, indeed, they follow their Chinese predecessors, and on the other hand to greater enjoyment of patterns made up of straight lines or very simple curves, as partly shown in Fig. 27. In Europe, as has been said, such power is less common, but on the borders, in Syria and in the lands of the Levant, it has never failed; see Fig. 155, in which is shown a door-head of glazed tiles, probably from

Cairo, and of the fifteenth century of the Christian era. The Persian grace of design and the Persian gift at composing non-natural flower-form and leaf-form can hardly be better shown.



FIG. 155. Door-head of painted tiles from a mosque in Cairo
(Marquand Collection)

In the fourteenth and fifteenth centuries there was in Europe a very great accession to the already respectable knowledge and power over such pattern drawing. It is probable that the importation from the Levant of Oriental stuffs had much to do with this; but, indeed, the revival in this sense had begun already. The borders of the wall paintings in the church of St. Francis at Assisi are a very notable instance of this, but similar work is to be

found in many parts of Italy and to a certain extent in the north. Somewhat later are the border patterns in the church of St. Andrea at Vercelli, in Piedmont (Fig. 156).

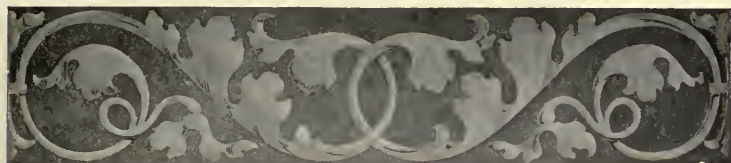


FIG. 156. Painted borders from Vercelli; thirteenth century

(From Gruner)

To aid the effect so easily produced by contrasting hues laid one beside another, or one upon another, the use of flat decoration includes the use of slight embossing or relief; that is, the allowing of certain parts of the pattern to project decidedly from the flat surface, as indeed was suggested above

in connection with Figure 153. There is no difficulty in producing similar effects on a much larger scale. Thus, flock-papers allow of a pattern, raised, and of soft, velvety surface, upon a ground of smoother surface, nor is there any difficulty in getting a similar velvety effect by dusting powder of some kind into the paint while fresh. These are, of course, the devices for work of no great pretension and where only a slight relief is required. If for any reason the pattern must have considerable projection, the decorator turns to stucco, or to carving, or to embossed metal; see Chapters III, IV, XV. Very brilliant and famous mural painting has been helped out by a free use of relief, which, of course, is exactly as effective when produced in plaster as if carved in a harder and more admired material. Great interest has been excited by the relief in Pinturicchio's frescoes in the famous Borgia apartments of the Vatican, and a lively dispute has been carried on as to the legitimacy of such devices. On the other hand the magnificent mural painting of John S. Sargent in the Public Library of Boston, Massachusetts, has been accepted without any very active remonstrance, and this although the parts in relief are sometimes gilded with metallic gold, making their projecting forms extremely distinct.

There is nothing to prevent the representing of human subjects in perfectly flat painting. Suppose that a draped figure is drawn in strong outline



FIG. 157. Painting on
the vaulted roof of Le
Mans Cathedral, four-
teenth century

(From Gélis Didot)

with no hesitation or timidity, so that the outline remains plainly visible in brown or brownish red, and that then every separate part of the dress, the appendages, and the unclothed parts are filled in with flat color. Let the robe be of red, the cloak of dull green, the face of a conventional brownish pink, and so on ; the experimenter will be surprised to find that a very slight touching of these flat colored surfaces, with lines expressive of the folds of drapery and the roundings of the clothed or unclothed form, will make of this figure, or group of figures, a highly decorative passage of color, and even a tolerably comprehensible and very interesting record of a scene or incident. Thus in Fig. 157 is shown a detail of the painted decoration of Le Mans Cathedral, — one of the angels in the vault of the Lady Chapel. This work is of the flamboyant Gothic period ; a time when mural painting was perfectly well understood in the North of Europe. The difference between this flat painting and the elaborate and complete color design of a century later, reminds one of the recognized difference between the painting of about 1450, on the Florentine vaults and the Siennese walls, and the paintings of the Venetians, about 1550, on their huge breadths of strained canvas. In either case there is a century between the culmination of purely decorative art and the “high midsummer pomp” of the great expressional schools.

In such painting as that of Le Mans, there is, of course, no attempt at rounding of the figures, or what is called projection ; or at any such effects as perspective, or the opening up of a distance behind the principal figures. Still more important is the fact that there are no cast shadows ; but this peculiarity is noticeable also in the miniatures of manuscript books even as late as the sixteenth century, in all the beautiful and varied paintings of the Far East, which have interested Europe so much during the last thirty years, and again in decorative windows, even of the most splendid elaboration. If, indeed, a specimen of such work were to be offered to us, with cast shadows included in the composition, it would pass in the one case as a fraudulent imitation, in the other case as a very bad design, or one showing signs of a marked decadence in style.

It will be noted, then, that design in flat painting is not wholly unlike mosaic (see Chapter XVIII) in its principles. It differs from mosaic in allowing much greater play of form and variety of line, while being inferior to it usually in strength and profundity of color, and of necessity in sparkle and play of light.

One institution, partly a matter of fine art and partly a pseudo-science, is closely connected with painting in flat color. This is the art of emblazoning ; that is, of representing according to the rules of Heraldry, or more properly Armory, the

escutcheon of any person entitled to bear arms, together with the minor accessories, as the crest, and, in some cases, the supporters. This study of "honorary arms" is of value to the historian and genealogist; but to the artist it is nothing, it is without interest, because of the positive rules which decide in advance and from other than artistic reasons the juxtaposition of the different tinctures;¹ blue and red, or red and black, with gold or silver charged upon either, — combinations of crude colors and metals which cannot be altered, either in character or in proportion, to suit the requirements of the design. Heraldic devices are more supportable in glass because of the play and glow of color possible in that material (see Chapters IX, XVIII). Thus in Fig. 158, which shows without color² the escutcheon of the family D'Épinal in Lorraine, the cross is silver, the field

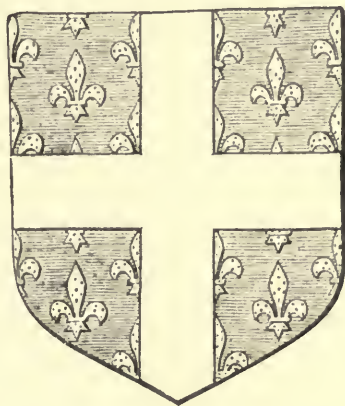


FIG. 158. Azure semée with
Fleurs-de-lys, or, over all
a cross argent
● (From Bouton)

¹ *Tincture*: in Armory (a branch of Heraldry) one of the colors, metals, or furs used for the field, or for the great divisions of the field, or for bearings.

² *Bearings shown without color*: this is done by a conventional method adopted in the seventeenth century. A surface with vertical parallel lines

or background of the four quarters is blue, and the fleurs-de-lis are gold. This escutcheon, unusually varied and pretty in effect, is still a poor and feeble piece of decoration when painted on wood or plaster, but in mosaic of glass it has a certain interest. Those escutcheons which display counter-

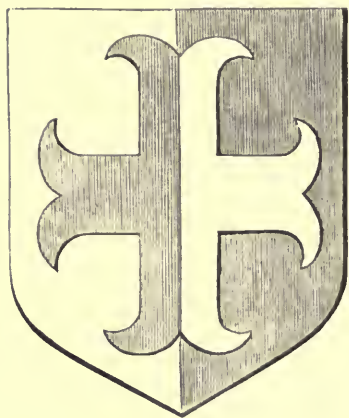


FIG. 159. Party per pale argent and gules, a cross ancree counterchanged
(From Bouton)

changing¹ are more attractive, because it is a useful element in all flat colored decoration to break one hue into another; thus Fig. 159 is the escutcheon of the family Lezay-Marnezia of Lorraine and Bar, and is divided by a vertical line into silver and red, and the cross ancree charged upon this escutcheon is red where it comes

on the silver, and silver where it comes on the red of the field. Under the best circumstances, however, escutcheons of arms are poor things for decoration, nor has there yet appeared a truly artistic manner of treating armorial bearings. In the later middle ages, when Heraldry

is supposed to be gules (red); with horizontal lines, azure (blue); with lines horizontal and vertical, sable (black); with points or dots, or (gold), and when left white, argent (silver).

¹ *Counterchanging*: see definition, Chapter XVII.

in all its forms was a living institution, escutcheons were often carved in stone or wood, with a slight relief of the bearings from the field, and perhaps with a convexly rounded surface of the escutcheon; then, in the coloring, a slightly more artistic treatment was practicable. Moreover enamelling was sometimes used, and a blue or red ground was broken up by a scroll-work of gold, so minute and delicate that it was seen to be no part of the heraldic emblazonment; but this was costly and of necessity rare.

In embroidery heraldic bearings assume a new interest. The play of color or lustre on the silky surfaces of the loose hanging, or even the smaller folds of the garment or banner upon which the embroidery was done, suffices to remove the objections as suggested above. We are not to forget, however, that heraldry was but a small part of the brilliant color decoration of the times when it was alive and useful, and that even the most ardent pursuivant-of-arms would have hesitated to make its painting the chief part of any scheme of decoration.

Chapter Twenty-One

GEM ENGRAVING AND DIE SINKING

IN this chapter are treated two artistic industries, each of which has been of singular importance in the history of fine art. After the stateliest sculpture and the most elaborate and imaginative painting on a large scale, the diminutive works of the engraver in very hard substances, such as the intaglios of antiquity and the Renaissance, are of the highest value. Again, the coins struck¹ by Grecian cities from their now lost dies, and the struck medallions of the Renaissance and of later times, are the most fascinating and the most highly esteemed works of fine art, after the great monumental works. Indeed, in the matter of our artistical education, the utmost value is to be claimed for these arts as they existed in antiquity; because the works of art so produced have come to us intact — without restoration; and also

¹ *Struck*: impressed by a die, as contrasted with what is cast or embossed by hammering. During the fifteenth century and since that time many medallions have been cast in bronze, and it is necessary to distinguish them from those which are simply impressions of a die,

because they are known to us in great numbers and can be compared one to another for their artistic excellence. No person can be sure of the originality of an ancient statue in a museum; with a few exceptions this may be the work of a copyist of inferior rank, and therefore the memorandum it gives us of the true nature of the original work may be misleading. On the other hand, the intaglio, the cameo, and the coin are themselves the unquestionably approved work of a definite epoch, and the modern student may compare these works of art one with another, and draw his own conclusions as to the relative importance of schools and epochs, and often of individual artists whose names are known by their signatures affixed. Under the head of gem engraving comes also so much of the lapidary's work as consists in sinking, by means of the drill or diamond point, incisions and hollows either for their own sake or to throw into relief a raised pattern, all as explained below.

The two arts of gem engraving and die-sinking differ in this, that the work of the gem engraver is in material so hard that the ordinary cutting tool cannot attack it; while the work of the die sinker, although in steel, is yet done in steel so far softened for the occasion that the hardened tool of the engraver can cut it, much as the burin cuts lines in the process of engraving, in the usual sense of that term: see Chapter XIX. Apart

from this, the way of work is not dissimilar. Nine-tenths of our interest in gem engraving is given to the intaglio or the incised engraving or hollowed work of art. Cameos, the sculptures in relief, are treated by themselves in another paragraph below; but in Fig. 160 a small and simple



FIG. 160. Engraved gem, veined sardonyx, set in finger ring. Engraving of Muse, probably antique
Cameo in stratified chalcedony, set as finger ring. Uncertain epoch

cameo is contrasted with a good though not extraordinary intaglio, set as a seal in a ring. If the intaglio were as much the final work of art as the cameo is, it would be impracticable to show it properly in photography. As, however, the intaglio exists for the sake of the relief impression from it, Fig. 161 gives, much enlarged, the relief impression of the gem shown in Fig. 160. The intaglio, then, and the die are closely alike in this, that the artist is producing the reverse of

the design which he has in mind. In the case of the die sinker, this is obvious, because dies are not shown as works of art, whereas the disks or plaques of metal struck from them are so esteemed and so studied. In the case of the intaglio gem-engraving, the purpose of the artist is still to produce a negative, a hollow, the impression of which is really his design ; but our admiration for the gem itself, its natural beauty and the refined workmanship bestowed upon it, taken with its traditional use as the jewel of a seal ring worn continually, lead us to put the originals, the negatives, into our show-cases and cabinets, though usually accompanied by impressions in wax or plaster. By looking through a transparent gem, as a carnelian, an amethyst, or any one of many varieties of topaz, the design is seen as if it were solid, or in relief. If this look through the stone is from the reverse, or smooth side of the thin plate of hard stone, the design will be seen not only in relief but even as a Positive, that is to say, in exactly the same relation of its parts and turned in the same direction as the impression would be.



FIG. 161. Enlarged photograph of wax impression from the engraved gem, Fig. 160

The original of Fig. 162 is cut in a piece of beryl (aquamarine) so transparent that no photograph of it could be procured; but in this instance the view of the intaglio through the substance of the



FIG. 162. Enlarged photograph of wax impression from modern engraved beryl; original one and seven-sixteenths inch long or high

gem would be perfect, were it not hindered by a flaw and by the drill-hole which goes through the stone, from top to bottom, and bars the transparency as by a slender post. This intaglio is a copy, with slight changes, of the famous Eleusis relief in the Athens Museum, Demeter and Kora with (perhaps) Triptolemus; but an eagle has been added overhead, and the zigzags below the ground line,

because of the oval form of the disk. What is curious here is that the relief impression, Fig. 162, is reversed from the Greek original. The gem engraver has worked direct from the original, and not as if seeing it in a mirror. It is because of the beauty of the precious stone, with its incised pattern, that we accept the intaglio itself as a work of art complete and individual, even as we do the

cameo; nor does the practised admirer of such things insist on a constant reference to the cast or impression to judge of the work of art.

From these considerations it will be seen how important to us are these little objects which in antiquity were so abundant that every person not a slave, or in some way without responsibility or place in the world, wore a "signet-ring," the impression of which went far to replace that written signature which we in modern times have come to consider the one fixed and authoritative sign of ownership, or of consent. This use of the seal was to a great extent caused by the lack of such cursive writing as Western peoples use in modern times, and the same lack of adaptability of the Arabic character, as of the Chinese ideograph, has led to the continued use of seals in Mohammedan nations, as in the remote East, for precisely the same purpose. The daily necessities of buying and selling, of transferring land and making the will, gave rise in antiquity to the constant use of the engraved gem treated as a seal, and caused the industry to assume such



FIG. 163. Hematite cylinder, seven-eighths inch long, deeply engraved. Probably Babylonian work, about 2500 B. C.

proportions that it could produce and include a most refined art. In remote antiquity and in



FIG. 164. Wax impression of cylinder, Fig. 163

Western Asia the cylinder of hard stone was used.



FIG. 165. Cylinder of pink chalcedony, one and one-fourth inch long. Assyrian work, eighth or seventh century B. C.

Fig. 163 shows such a cylinder of hematite, and very deeply cut, the marks of the drill being plainly seen, as noted below. Fig. 164 is an impression of the same cylinder: it is clear that the use of it by its owner might at pleasure include one whole revolution or one and a half, or more. Fig. 165 is a later seal of Assyrian work, of pink chalcedony; Fig. 166 is its impress. Among later Asiatic nations, the reach of artistic development in

this branch has not been so great, but the interest to the student of life and manners is almost equally great in these more recent and less admirable intaglios. Some of them are of Arabic or Persian script alone; and these characters are as fine in effect (see Chapter XXII) as they are awkward for swift and ready writing. A seal is always a seal,



FIG. 166. Wax impression of cylinder, Fig. 165

and the characters thereof are reversed; but the amulet, the personal jewel with the sacred legends or the prayers cut upon it, is turned the right way. Fig. 167 is an enlarged picture of such a charm, or witness of the wearer's devotion, as you may please to consider it; Persian work of perhaps the eighteenth century, engraved upon three chalcedonies and set in a pretty silver mount, made to look rough by the enlargement. The work of the European Renaissance was, on the other hand, factitious; it was a deliberate attempt to restore the lost art of the ancients, apart from any sup-



FIG. 167. Persian amulet, to be worn on the arm or elsewhere on the person. Eighteenth or nineteenth century

posed utility, and the few and comparatively unimportant pieces of more modern production have been still more the results of an art not founded on our immediate requirements, but eminently a part of our luxurious diletantism.

In all work in very hard materials the revolving drill is the tool of first importance. This drill is not of necessity made of a very hard substance, — for it does not act like a gimlet in wood, but by keeping up the friction of fine powder or “Diamond dust,” as it is often called, though several materials which form a hard and gritty powder are used, such as emery. In modern times a small wheel is rapidly revolved, the drill being secured to it. The gem being small and light,

needs to be held firmly, and we are told that in antiquity it was fixed in a bed of cement while the drill was moved about and the rotary motion given by an entirely portable "bow," the string of which rotates the drill rapidly in alternate directions. The modern artist more often holds the gem in his hand while the drill is fixed; the practice is firmly intrenched in the traditions of the industry, but artists are generally of opinion that more freedom of design could be had by following the antique method. In a few cases a machine is set up of considerable elaboration, heavy in its parts, in order to secure perfect stability; and lapidaries' work, other than heads or very refined details, may thus be done, wholly by machinery. Artistically speaking, this work may be disregarded here.

The earliest gems, and especially the signets of the Orientals, have been cylindrical in form, the subjects engraved upon them showing the holes sunk by the drill, and a curious form of design is based upon partial retention of those smooth round holes. Thus in Fig. 163 no secret is made of the free use of the drill. Every one of the round bosses in Fig. 164, corresponding to pits in Fig. 163, is a separate drill-mark. Antique gems which show no trace of such sinking of smooth round holes are spoken of by collectors as "diamond-point gems," and the assumption is that they have been cut free hand, and with very

little use of the drill, or none. The left-hand gem in Fig. 160 is such an intaglio, and it is noticeable that the sunken figure is not very highly polished. Again, the straight upright groove which denotes the altar of incense behind the Muse is not even truly vertical in its lines; it has been disregarded, while the nude parts of the figure and the folds of the drapery falling upon the feet have been very highly wrought.

It is true that the term before quoted, "diamond-point gem," is used by dealers for any stone which does not show high polish in the actual engraved head, figure, or other subject, but it is also well established that some stones were really engraved by hand with such a hard point. The work of the Greeks of the best time is in a way distinguished from that of the Orientals by the absence of any sign of the drill in the most delicate work.

It is easy, then, to see what the gem engraver undertakes when a relatively large head or a draped figure, or still more, a group of figures, is in hand. His work lies half way between that of the sculptor, in the usual sense (see Chapters III and XXIV), and that of the engraver (see Chapter XIX). He is not likely to undertake the multiplicity of details, with the larger details including combinations of smaller ones, and this merely because of the minuteness of his design. On the other hand, he is not likely to indulge in the purely decorative effects sought by the en-

graver (see Chapter XIX) because the very hardness of the stone and the slow process necessary for cutting it make it hardly worth while to undertake the task except for more serious artistic work. The result of too great an undertaking is seen in Fig. 162. The enlargement of the picture from $1\frac{7}{16}$ inch to nearly twice that length, or height, shows at once the extraordinary clumsiness of work in heads and in drapery. There can be no doubt that an artist of an earlier and better time would have produced a finer result; but this when seen even with a lens in the gem passes for a really beautiful piece of work. In Fig. 165, the Assyrian cylinder (of which Fig. 166 shows the wax impression) the willingness of the artist to content himself with little is very evident. He was a more skilful man, it is probable, than he who engraved the cylinder shown in Fig. 163; but he was content with producing such a design that the owner of the cylinder could be sure of the individuality of his own signet. Nothing is more evident than that he disregarded the possibility of producing an elaborate design. This, then, is the reverse of the conditions of the large gem, Fig. 162, that was as much too elaborate an attempt as the Assyrian piece seems to us too slight; but, as in most cases, the engraver in hard stone is led by the very difficulty of his design to undertake all that he dare hope to achieve, but no more,

the result is that the work done by the gem engraver is so very often of the greatest possible artistic value. It reaches often a degree of merit not surpassed by any except the most important sculpture of heroic size.

Coins and medals which are struck by means of a die are instances of the same art that has been treated above. They also represent the refined process of intaglio sculpture in hard material. Relief sculpture in metal is obtainable by casting (see Chapter X) and by hammering (for which see Chapters IV and X); but nearly all the pieces of money which pass or have passed current among men, and the greater number of the ornamental and memorial medals, are produced by forcing the softer metal into the incised form cut in a piece of steel and afterward hardened. This process has passed into our most intimate tradition, so that it is used for memorials and tokens of honor. Fig. 168 shows such a die and the medal struck by it, the intaglio and relief being exactly comparable to the engraved gem and its wax impression, as shown above in the illustrations of this chapter. That the stamp upon the bronze should be so clear and sharp, so exactly a reproduction of the die in all its details is a marvel, of course. This points to the surprising fact that the softer metal is so very plastic that it can be forced into the minutest points and lines of the intaglio pattern. Everything is relative; this bronze can be made to take

an impression from hardened steel as fine as that which wax takes from sardonyx. And in Fig.

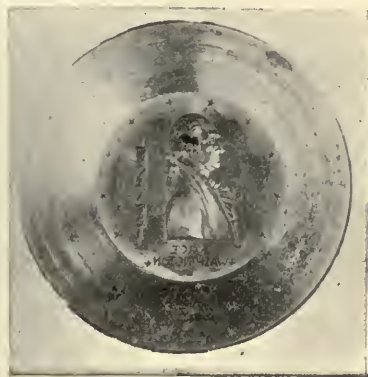


FIG. 168. Die for Washington medal, engraved by Tiffany & Co., 1889
Impression in bronze from same die. The original is one and three-eighths inch in diameter

169 we have another bust of Washington, the obverse of a medal of which the reverse records his election to the Presidency in 1789. This remarkable design is given here instead of a more conventional work of the recognized sort (like one of the four hundred medals struck in honor of the achievements of the first Napoleon) because it shows very well the capacity of the struck medal for



FIG. 169. Washington medal, unfinished proof, the reverse showing experiments in the legend. To commemorate events of 1783 and 1789

realistic or imaginative or merely fanciful work. The great and famous silver coins of the Grecian states and colonies would show that, but perhaps it is better studied in modern examples. We are all prepared to find the classic and the pseudo-classic feeling in the finer medallions, but perhaps only in the last few years of the nineteenth



FIG. 170. Medal by Anton Scharff. Commemorative of Walpurga Spöttl

century was the other note sounded, the note of familiar, human, even domestic art. Fig. 170 gives both faces of a small bronze medal by a very celebrated modern medallist, Anton Scharff of Vienna, born 1845. This commemorates the eighty-seventh birthday of a person whose character is expressed by the oak and ivy, rose and laurel, twined around the distaff; and the motto, "True, simple, straightforward." There have been struck many such domestic commemorative medals. Fig. 171 gives one of the square-cornered

reliefs, the memorial of Christofle, the Parisian silversmith, the work of Louis Oscar Roty (born 1846), to whom also we owe the new coinage of France (see Fig. 172).

A cameo is a carving in relief, usually in a very hard stone such as chalcedony or onyx, though in



FIG. 171. Plaque by L. O. Roty. Commemorative of Charles Christofle, 1863. Three and three-fourths inches long

modern times many have been carved in the substance of certain thick and compact marine shells. There is no particular connection between the central idea of the cameo and the use of different colors in the material, but it has always been a fancy of the workman to so use his stone or shell, when made up of layers of different colors, as to bring the head or figure in a light material strongly detached upon the dark ground, or perhaps the reverse of this. Thus the small cameo head shown

in Fig. 160 is in stratified chalcedony of unusual color, the dark layer forming the background of a singular olive brown color, while the head is very light yellowish brown at the part nearest the back-



FIG. 172. Enlarged photograph of two-franc piece, by L. O. Roty

ground and grows darker in the parts of higher relief, and the hair behind the ear is as dark as the background. All this points to the utilization of three layers of stone, the uppermost one all cut away except for those locks of hair and excepting that a very little of its innermost surface has been allowed to tinge the highest relief of the head. The background, on the other hand, has been cut away freely, the neck and the whole profile are

undercut so that they project a little and are in that way thrown into still more visible relief.

Fig. 173 is a photograph of one of the largest cameos known, perhaps the second in size of those



FIG. 173. Antique cameo : white figures on dark, warm brown. Art-History Museum, Vienna, Austria

which antiquity has left us. This is in the Museum at Vienna, and measures about nine inches in width horizontally. As the subject is evidently the apotheosis of Augustus, who is seen enthroned and attended by Victory and Fame and the Genius of the Emperor, so the date must be put at between 25 and 50 A. D., and therefore at the very culmi-

nation of the Augustan epoch. This date is again fixed by the subject of the lower band, which has to do with the erection of a trophy in memory of the subjugation of Pannonia. Still the workmanship and the artistic conception are not to be compared with the finest Augustan sculpture that we know, and this is largely to be attributed to a certain clumsiness which nearly always attends the production of elaborate cameos. The magnificent piece in the National Library at Paris, the largest known, is a little more delicate in design and execution, but not essentially different. Another fine cameo is in the same Vienna collection with the one shown in Fig. 173. It is six inches wide horizontally, and has four portrait heads cut almost exactly as the relief on a medallion shows — one head in profile relieved upon another; and this, having only these heads and appropriate emblems, is on the whole a finer thing. It is tolerably evident that the hardness of the material, the difficulty of working with a drill in such very slight relief, the necessity of keeping the color composition perfect, — in light upon a dark background, — and the general fact that such costly pieces of work are seldom undertaken except at times of decadence, all point to a certain lack of artistic importance in the art of cameo cutting on a large scale.

The whole subject is not to be dismissed, however, without a word about the polychromatic effect combined with the effect of light and shade

which gives relief. Thus in the great cameo shown in Fig. 173, the white stone of the relief is wrought so very thin that the dark layer shows through the semi-translucent white layer in all the parts except those of greatest projection. It shows then as a kind of purplish white, and it is to be noticed that, as the relief grows more thin near the edge, or in the depth of a fold of drapery, it shows this purplish-white tinge, against which, again, the high relief in almost pure white is set off. The complications which this produces in the effect of light and shade are obvious, and the added difficulty of the task laid upon the sculptor can be partly guessed. Another great cameo in the Vienna cabinet, about five inches by six, a full-face portrait of Tiberius, is in unusually high relief, and so wrought that the tip of the nose projects perhaps an inch and a half from the background, showing the existence of a most unusually thick layer of the lighter-colored chalcedony. This lighter-colored layer is bluish white, singularly cold in effect, and the background is only slightly warmer in hue; altogether a most unusual tone, producing an exceptional effect of polychromatic sculpture.

A very curious modification of the cameo idea is seen in a celebrated example ascribed to Benvenuto Cellini. It is an oval with the nude principal figure probably an antique chalcedony; but all the rest of the oval and the whole frame, which is very elabo-

rate, have been wrought by the famous jeweller and sculptor in gold and enamel and set with precious stones of great value. This is, indeed, a toy rather than a work of art; but the conception of the whole oval disk as an alto-relief partly in chalcidony, partly in gold, is one of the few designs in modern jewelry in which color has been allowed to help form in an uncompromising way. It suggests to the student some part of the artistic effect of the chryselephantine statuary of the Greeks.

It is necessary in this connection to speak of the carving of glass with layers of different colors, in which cameo effects are very closely copied. This process has been used of late years in a commercial way for the production of showy glass dishes and the like, and a private collection, broken up about 1890, was rich in these costly but ineffective pieces. The Chinese have used the art for a couple of centuries, showing the greater decorative sense of that people, and yet not producing works of vast importance artistically speaking. The most common examples of it are the little snuff-bottles with which many collections are adorned, but a vase twelve inches high is now in New York, of which vase the complete body is of a mottled white glass very milky in appearance, and of a texture very different from anything known to the glass workers of Europe (see Chapter IX); while the pattern in high relief, made up of scrolls and dragons, is in ruby-colored glass with a beautiful lustre and color.

It is evident that this piece has been made by flashing white glass with red in the approved way, only with the layer of red glass unusually thick, and then the whole thing has been wrought into shape by the drill and the revolving wheel. As in all such work, the amount of patient labor is a little out of proportion to the value of the artistic results.

There has been mention in Chapter III of the process used in carving the hardest materials. Of these materials one is often perfectly transparent and uncolored, viz., rock crystal, and in this material basins and cups have been carved, the surfaces of which are wrought with the most delicate sculpture in low relief or by simple intaglio engravings. The effect produced by this is, of course, evanescent, even very doubtful, and a person whose chief interest was in the sculpture would hardly be attracted in an exceptional way by these wonderful *tours de force*. No one who enjoys handiwork and has watched the different processes with a loving discrimination can fail to be interested and even excited by these marvellous works of human patience and skill, but the purely artistic result is at a minimum in comparison with the labor expended. Nearly the same comment is called for in the case of the jade carvings of the Far East, except that jade, having many different colors and many different modifications or varieties of one general color, may have a chromatic interest as well. Thus, a remarkable piece belonging

to a private collection presents a group of two cylindrical vases with very thin walls, and a branching vine or spray of leafage which lies between them, attaches itself to both cylinders, and holds them together. The material is a very dark green jade, mottled or speckled, producing the effect not of long and branching veins, but of rounded spots which crowd one another close and modify the colors of one another. Now the marvel of this and the cost, its enormous money value, is in the fact that it is all wrought out of a single block, the slender sprays and thin leaves all being left from a most elaborate drilling and polishing. The charm of it to the lover of art-objects, its fascination to the man who can compass the price of it — all that we can perfectly understand; but if the cost of it would pay (as it would) for a noble bas-relief of life-size figures, that fact should influence our relative judgment. The Portland Vase in the British Museum and the exquisite amphora at Naples, in which cameo-work in glass reaches high excellence, and the incomparable Tazza Farnese, a cup-shaped piece, about eight inches across, in which the sardonyx is wrought on both sides into colored reliefs, could not be equalled now; but if the attention of modern artists is turned to architectural sculpture and to bronze and marble, wood and ivory, in portable shape, it is probably better for art.

Chapter Twenty-Two

CALIGRAPHY

THE art of making writing beautiful is not in use in modern Europe, and it requires some effort of the imagination to bring this ancient art back to its place, in our mental view of the whole subject of fine art. Moreover, the forms of the Roman alphabet, though modified to howsoever great an extent, are found to be inadequate to very decorative effect. The peculiar position in art of this Roman alphabet will require a little consideration. The European world of the middle ages used a Roman letter, both capitals and small letters, and gradually modified this by the hands of unnumbered scribes, through many generations, into a curious angular and very compactly written text which is commonly known as the Gothic letter, or, when found translated into type and used in printing early books, "black letter." This sharp and over-picturesque form of letter cannot have been as easily read as the writing of rounded and delicate forms which is found in Irish and Early English psalters and the like.

Fig. 174 is a part of a page of a remarkable Latin Bible, apparently of the twelfth century, and

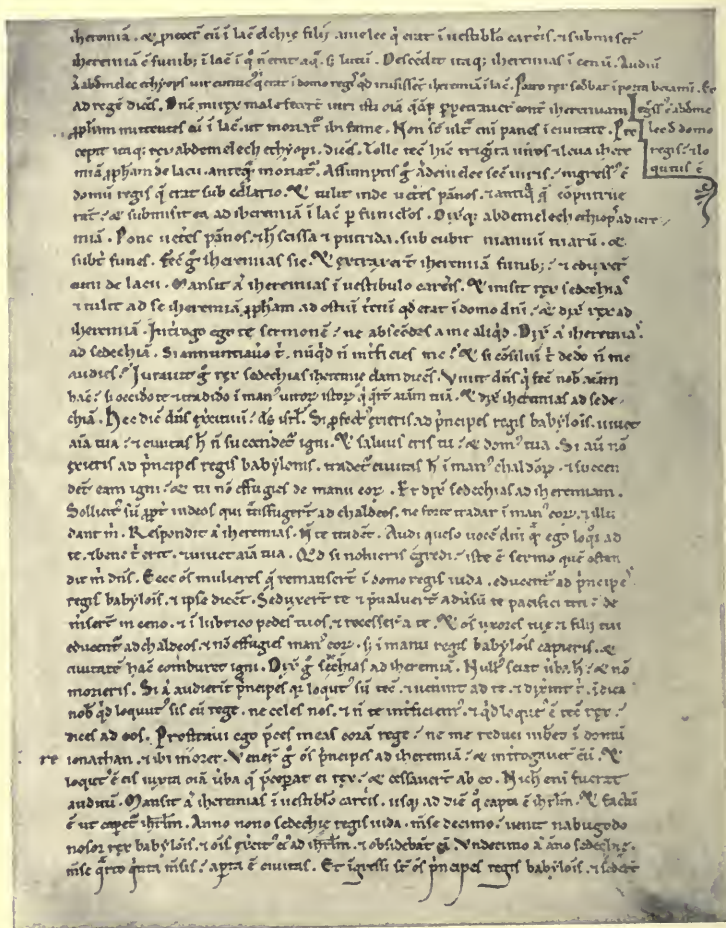


FIG. 174. Page of manuscript Bible, twelfth century. The lettering in bright brown ink on yellow vellum. The band which encloses the insertion is emerald green

French. It has been slightly reduced. The total height of the block of lettering of this page is five

inches and eleven sixteenths, containing in that space thirty-eight lines of writing; although, as will be seen, the proportion of space between the lines of writing is unusually large. There may be noted the curious extension of the third line, evidently in consequence of an error of the copyist, who then used a decorative as well as utilitarian method of separating his insertion from the body of the text below. This book is in a sense a pocket Bible and much is sacrificed to the necessity of compression, but the great legibility of the text is noticeable. Compare with this Fig. 175, which is a page of a thirteenth-century Bible, of French origin, and a very perfect and remarkable piece of penman's work. The letter used here is a perfectly developed form of the mediaeval "Gothic" character, and is more easily legible than our unaccustomed eyes would readily admit: but it is still not well adapted for current reading: it is prepared for the use of churchmen, of those whose eyes are continually on the page. A book of ready reference, or, on the other hand, a romance, written in this character would be recognized as absurdly ill used in its presentation. The struggle in Germany in recent times to replace the Gothic letter in literary books by the Latin character, as indeed the text of scientific, archaeological, and other scholarly books has long ago been changed, illustrates this point. Had there been in the thirteenth century a rising school of readers, and a supply of

manuscript books as abundant and cheap as that known to have existed under the imperial system

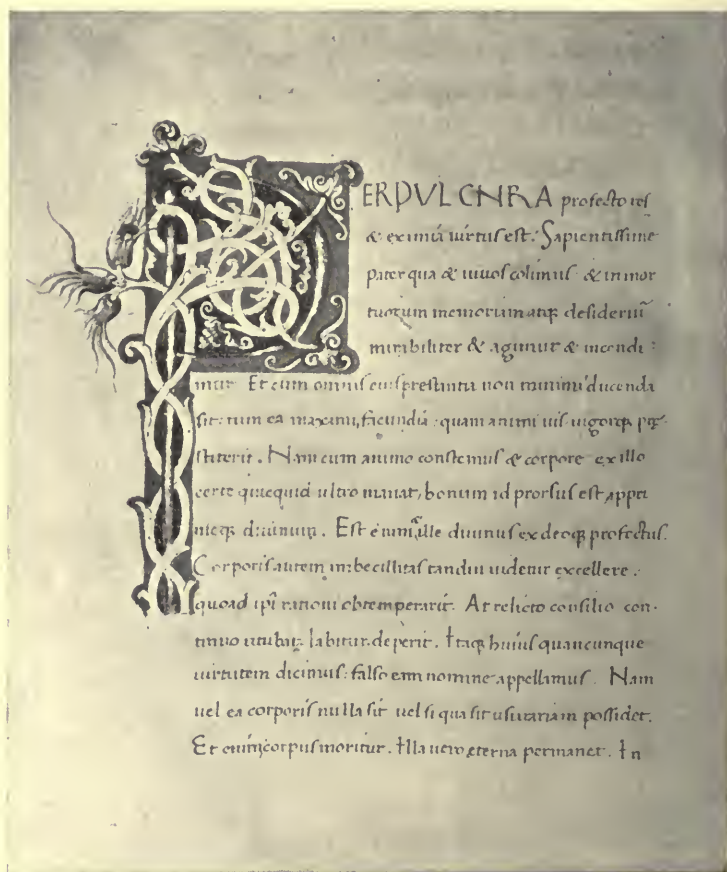


FIG. 176. Page of a manuscript, Italian, fifteenth century : reproduced at half the scale of the original. The cutting off at the foot of the P probably intentional, no design being ready. The text in pale brown ink on smooth vellum

of Rome, assuredly the protest against this harsh character would have been strong and successful.

The guiding principle in the invention of this alphabet has been, most obviously, decorative effect. It is well to note how perfectly the line, what might be called the *rank* of letters, is marshalled—how nobly it is ordered, and how strong has been the decorative instinct, in the minds which devised it.

With the revival of learning came naturally the demand for a far more legible text, and one of the evidences of it is seen in Fig. 176, part of a page of a manuscript of a Latin translation of "Xenophon, De Legibus." The great initial, P, is in leaf gold on a blue background, the scrolls which mingle with the form of the letter being white shaded a little with brown, and the filberts rather elaborately worked in brown and gold. This, however, is not the important thing. What we are concerned with is the writing of the page "per pulchra profecto res et eximia virtus est," et cetera. It is a part of that essay on Spartan polity which, according to the authorities, is certainly not to be admitted as Xenophon's writing. That which concerns our present inquiry, the transcribing of these pages on sheets of thin vellum, seems to be of the close of the fifteenth century; and, unquestionably, of Italian handiwork. A more elaborate piece of work is that shown in Fig. 177, the final page of a curious diploma dated in the characters before us, 1650. This is written entirely in brown ink in a beautiful italic character,

with the letters *D. Petrus D.*, and the whole word *Innocentii*, in gold.

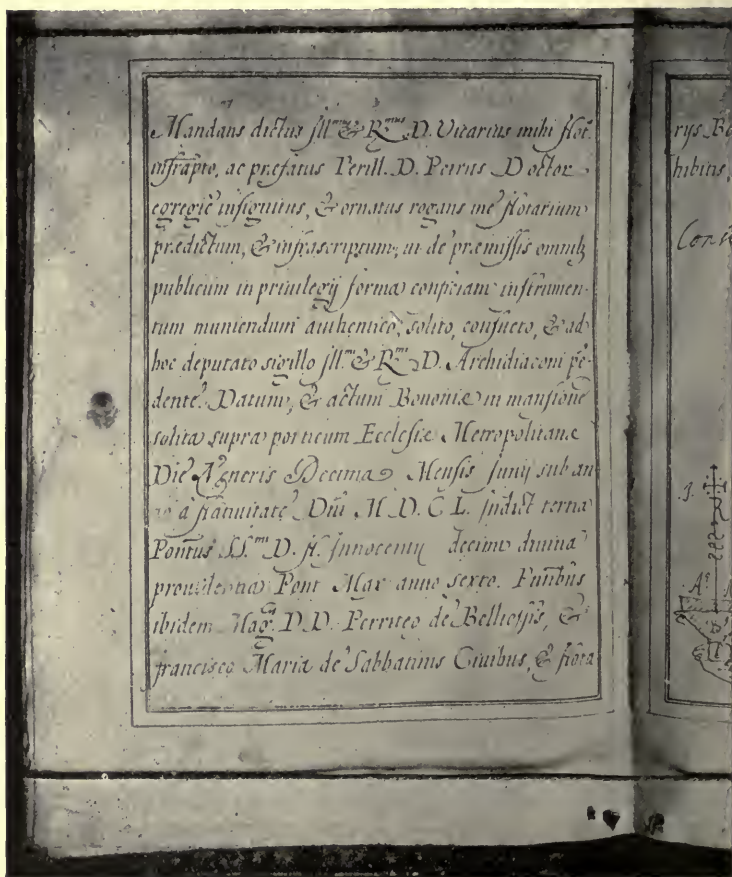


FIG. 177. Page of Diploma from the University of Bologna, written on vellum, 1650

Again, Fig. 178 is a page of a certain state paper in which the Doge of Venice, Francisco Contarino, gives certain instructions to his ap-

M. D. C. XIX, ad. XIII,
di Settembre in
Vregadi ~

Al Proueditor de
Almissa, et Suc-
cessori ~

Per diuerso deliberatione, et ordi-
ni del Consiglio di Dixi, et altri
del Senato è disposto, che li hereti-
ci, et altri, et altri, et altri
religion chauriali del nostro stato
non siano gouernati da pioni. Ma
bati, et altri superiori di stato. Ma
no, et ciò per molti conueniente
speci, et per ouare à liuori
portanti disordini, che seque-
nti et uolendoli, che le dea debbono.

FIG. 178. Page of Venetian state paper: instructions from the Doge and Senate, to Antonio Pasqualigo, Proveditor of Almissa, on the Illyrian coast near Spalato. Written on thin parchment, Venice, 1619

فِيهِ يَخْلُقُونَ فَإِنَّ كُنْتَ شَيْئًا إِلَّا إِلَهُ
فَعَلِ الْوَيْلُ مِنَ الْيَوْمِ يُقْرُونَ الْكِتَابَ مِنْ قَالِ الْفَاحِشِينَ
الْحَقِّ مَوْزَيْنًا قَادِرِينَ مِنَ الْغَايِبِينَ وَكُلُّهُمْ
مِنَ الْآيَاتِ كَذِبًا أَلَمْ تَرَ أَنَّ الْوَيْلَ مِنَ الْكَاذِبِينَ
الَّذِينَ هُمْ عَنْ صَلَاتِهِمْ سَاهُونَ الَّذِينَ لَا يُؤْتُونَ
وَلَوْ جَاءَهُمْ كُلُّ آيَةٍ حَتَّى يَرَوْا الْعَذَابَ لَأَعْلَوْا
فَلَوْلَا كُنْتَ تَرْحَمُهُمْ لَخَسَفَ بِهَا السَّامِيُّ الْأَوَّلُونَ
وَلَوْلَا كُنْتَ تَرْحَمُهُمْ لَخَسَفَ بِهَا السَّامِيُّ الْأَوَّلُونَ
وَلَوْلَا كُنْتَ تَرْحَمُهُمْ لَخَسَفَ بِهَا السَّامِيُّ الْأَوَّلُونَ
وَلَوْلَا كُنْتَ تَرْحَمُهُمْ لَخَسَفَ بِهَا السَّامِيُّ الْأَوَّلُونَ

يَلْمُونَ وَجَاءَنَا نَارٌ كَأَنَّهَا كَلْبٌ فَافْتَعَلَ
وَجَاءَنَا نَارٌ كَأَنَّهَا كَلْبٌ فَافْتَعَلَ
وَجَاءَنَا نَارٌ كَأَنَّهَا كَلْبٌ فَافْتَعَلَ
وَجَاءَنَا نَارٌ كَأَنَّهَا كَلْبٌ فَافْتَعَلَ
وَجَاءَنَا نَارٌ كَأَنَّهَا كَلْبٌ فَافْتَعَلَ
وَجَاءَنَا نَارٌ كَأَنَّهَا كَلْبٌ فَافْتَعَلَ
وَجَاءَنَا نَارٌ كَأَنَّهَا كَلْبٌ فَافْتَعَلَ
وَجَاءَنَا نَارٌ كَأَنَّهَا كَلْبٌ فَافْتَعَلَ

Fig. 179. Two pages of a Koran, Surat X, 90-107, Arabic manuscript, Persian, about 1793

pointee, Antonio Pasqualigo; the page in question is dated 1619, the fourteenth day of September, "in the senate" (in Pregadi). Here the character might be called manuscript in our modern sense; it is really a cursive writing, and it is for this reason that it is well to place it at the end of this little series of European specimens. For it is to be noted that fine caligraphy is entirely remote from writing-master's "penmanship"; that is to say, from the swift and flourishing way to which the pen of the ready writer in modern times so easily inclines. It is a maxim of the drawing-schools that the draughtsman's pencil must never run away with him, nor his hand relax itself into penmanship or anything like it. Every line must be drawn with deliberate and continuing purpose: so in this page, Fig. 178, although the writing is "current," the letters attached to one another more or less according to our modern system, yet the calm and tranquil setting-down of letter after letter is most noticeable; nor was this scribe less proud of his masterly work than he of the thirteenth-century Bible.

To consider now the work of those peoples who do not use the Roman character nor any modification of it, Fig. 179 is a page of a manuscript copy of the Koran, written in Arabic, in Persia, in the eighteenth century of our era. It will be noted how perfectly the Arabic character lends itself to

such decorative effect. As the form of the letters is the important part of caligraphy, and as this is nearly as free and as purely artistic in other manual processes as in writing with ink and the reed pen, it is well to compare, for the combination of Arabic letters, the written page given above with a piece of what seems more permanent decoration, namely, the Arabic and Persian characters shown in Fig. 167. The Arabic letters, while still remaining perfectly legible, combine with scrolls and flowers to make up designs complicated both in color and form; it is well known that these letters are used in architectural decoration, in the adornment of metal vessels and utensils, and in a thousand ways of off-hand as well as elaborated artistic work.

The people of the Far East, those who use the syllabic language represented in ideographs, have, with all the difficulties of their language for scholars and for beginners alike, the clear and perhaps sufficient compensation of never-ceasing variety of graceful curve in the forms of the characters which for them replace the letters of a Western alphabet. It is noticeable, however, that never do we see the characters combined with scrolls and the like in the way of the users of Arabic. The people of the Far East adorn their page, or their permanent inscription, in a most brilliant fashion; but they keep the adornment and the lettering apart, caring, we may suppose, so

much for the perfectly expressive and perfectly graceful form of every ideograph, that it is not

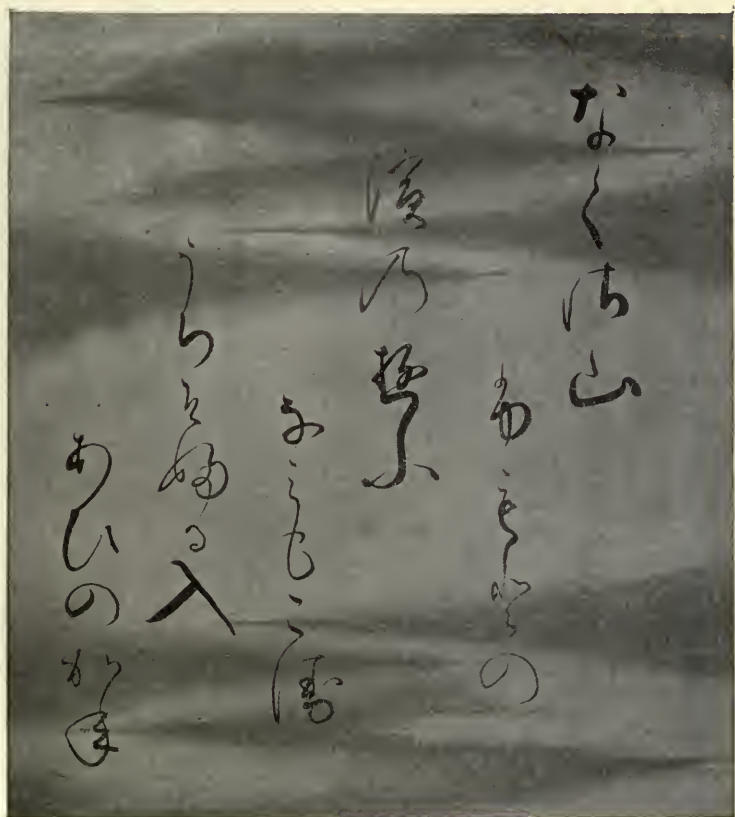


FIG. 180. Poem, Mount Nakusa and the sea beach. Japanese writing dating from the early years of the Tokugawa dynasty of Shoguns (1603-1868). Such writing may be taken as personal, of the nature of the handwriting of the poet rather than of a professional calligrapher

possible that this should be modified by decorative considerations. Fig. 180 is a page of poetical

allusion mounted in face of a delicate landscape in water-color. The two form a tenth part of a Japanese album whose binding and mounting are not very old; but the water-color drawings are assumed to be of the seventeenth century A. D., and the script given in our figure is nearly contemporaneous. The light buff paper is decorated by clouds of dull gold which hardly show in the photograph, and across these, disregarding them, go the vertical columns of written matter. It was not necessary to go so far into the past for beautiful Japanese writing. The supply of art treasures from the ancestral collections of Japan are not yet exhausted, and Western shops are still full of manuscripts and reproduction of manuscripts, of exceeding beauty; nor is the art lost; a Japanese gentleman will still write a congratulatory or grateful message in characters as carefully considered, and, in a traditional way "designed" for the purpose, as words are picked and chosen for the sake of rhetoric, or for poetical expression.

It would be quite easy to continue this examination by comparison of the engraved titlepages of the sixteenth-century books. Some of the larger Elzevir titlepages are adorned with beautiful lettering, evidently engraved carefully on copper, and printed carefully on tough old paper. The extension of caligraphy to the invention of beautiful letters, produced by no matter what medium, would

lead us into consideration of the noble lapidary inscriptions of ancient Greeks and Romans (see Chapter XIX) and the bronze tablets with letters in relief forming part of this and that Renaissance wall-tomb.

Chapter Twenty-Three

PRINTING

FOR the purpose of this inquiry the term “printing” must include the immediate preparation for the actual making of the impression. Thus in the matter of making paper prints from etchings or other engravings, and in the matter of making ornamental paper-hangings or printed calico, while the cutting of the block, the engraving of the plates, the making of the type for book-work, and the like, are all separate arts, and are considered elsewhere in this treatise so far as space allows, there is still a certain preliminary to the actual printing off of the desired impression, which is equivalent to the preparation of his palette by a painter, and which demands the utilization of a great deal of the printer’s skill. In the case of a book let this preparation be taken as including the “composition,” that is to say, the setting of the type. There is then room for the working of the artistic intelligence in the choice of the size of letter, the choice even of the form of letter, and the consequent careful selection of the particular design of

type to be used. Then there is much room for going astray, and therefore for careful treatment, in the matter of width of margin as compared with the size of the printed surface; and this becomes peculiarly important when the two adjacent pages are looked at together, the book being opened wide. How wide the inside margins, those nearest the back, are to be as compared with the outer edge and top and bottom margins, and how wide the top as compared with the bottom blank surface, are really delicate questions. So are the use of letters of different sizes, and the use of italics, of capitals, of "small caps.," of very large initial letters where a new chapter or section begins.

Fig. 181 gives a page of a curious old Horace, and it will be seen in this piece of printing how strongly the printer was interested in its comeliness. The type itself has been beautifully designed—it is a most intelligent modification of the "Gothic" letters dealt with in Chapter XXII. As no very large initials had been cast, as yet, the printer left space for the I of Integer, which space the calligrapher was to fill up with a painted letter and perhaps further decoration. Then the ode was beautifully set out with its longer and shorter lines; and margins and all other blank spaces were carefully considered.

If we should consider two open pages, taken together, of any fine book accepted as a model

of handsome printing, such as the Baskerville prayer-book of 1761, "price eight shillings and

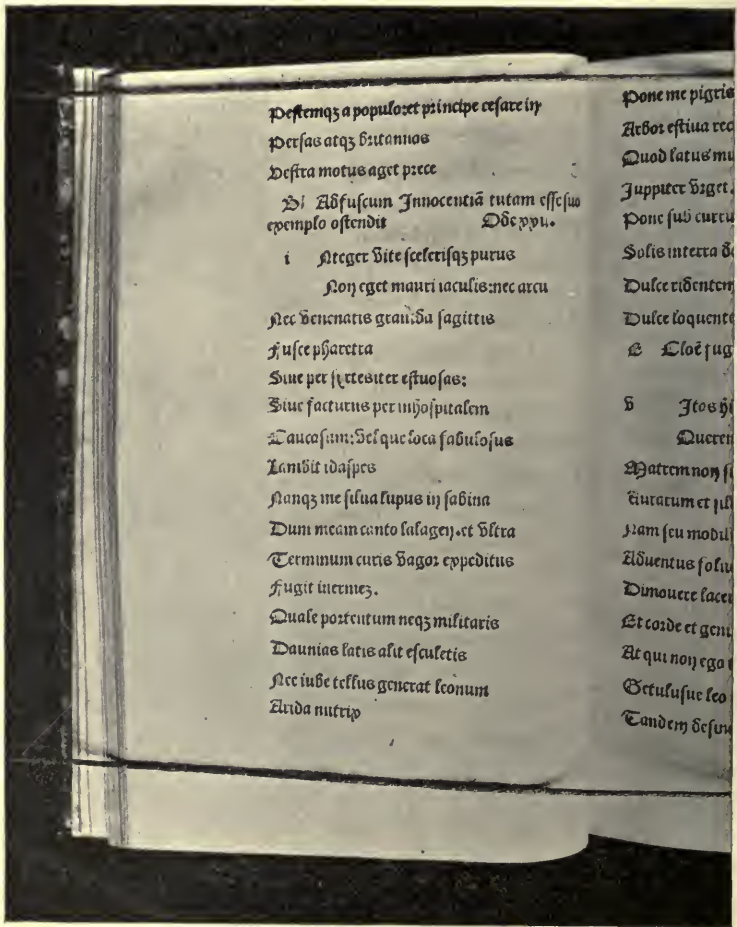


FIG. 181. Page of the Odes of Horace, printed at Paris for M. Anthoine Denidel, in 1498

sixpence, unbound," we should find a form of page especially prepared for easy and rapid reference,

Vita di sancto Hieronymo

pur apparea essere in un drappello di fanti
ne. E beche la forza p' ieiunio fosse pallida
nò dimeno nela mète erano uani desideri
Essendo il mio corpo frigidò & già la car-
ne mata: buliua lincēdio de libidine. E co-
si destituito de ogni auxilio hūano: p'stra-
to à piedi di iesu: bagnaua qlli cū lachrie
e cō capilli tergeua. Nō m' uergogno nar-
rare lamia ifelicitatanzī piāgo nō essere q'l-
lo che già solea. Mi ricordo tuto il giorno
e nocte cridare ad alta uoce e nō cessare di
p'cortere il pecto mio: sinā tāto che oldea
rephensioe dal signore dio. E pche timea
che la cellera mia fosse quasi da ise cogi-
tatioe cōsua: irato in mēstesso rigido e solo
piu ultra nel deserto penetraua. E la doue
trouaua locho cōcauo di ualle ouero aspe-
rita di mète: to uero doue uedeua p'cepicio
de ruppe q'llo esser cōueniēte a mia oratio-
ne reputaua: & i q'llo lamisera carne iacea
idio e testimoniō: che doppo multe lachry-
me: doppo che gli ochii erano fixi al cie-
lo: piu uolte in cōpagnia de angeli essere
mi pareua. Allora alegro & iucūdo cantaua
dicēdo: Signore nui corremo apresso te a
lodore di roi unguenti.

Come scō Hieronymo uēne i bethleem.



Inito il tēpo di āni qua-
tro che stete in q'sta esta
penitēza uenne ala cita
di bethleem & finalmē-
te si cōduxe fore di beth-
leem p' spatio de miglia
ter: doue era il p'sepio doue naque iesu xpo
benedetto: & ipetrata licētia de uelchouo
de ditta cita per nome cinillo: edifico uno
monasterio doue habitaua cō alquāti mo-
nachii seruādo regula apostolica. In q'sto

numero se ritrouo Eusebio cremonese gē-
tilhomo acui peticoe traduxe hieronymo
una epistola di greco in latino.

Come sancto Hieronymo exorta Eusto-
chio a seruare uirginita.



Ra la tre dōne nobiliss-
mi i sacre lettere istruete
da Hieronymo una fo
Eustochio: laqle ancora
mirabilemēte a seruare
uirginita exortaua: si-
militudine de gli gloriosi sancti Heroe
& archilleo cubicularii di domicilla ne-
pote di domitiano imperatore liqli cū ra-
giōe efficacissima exortauano q'lla lassare
aureliano suo sposo homo pur mortale
& offerire sua uirginita a iesu xpo celesto
sposo: unde di ral p'suasiōe domitilla co-
gnoscēdo la uenta refuto l'infelice sposo
e totalmēte aloipotēre dio sua uirginita
dedico in q'sto sancto p'posito da clemē-
te pōntifice romano fo cōsecrata.

Come una giouene da gēte armate e du-
ta in exilio i una isola.



Ognoscēdo Aureliano sposo
de domicilla da lei essere refu-
tato la fece dānare in exilio do-
po fecela cōduire a terracina ua

FIG. 182. Page of life of S. Jerome, from Vita et Epistole de Sancto Hieronymo, printed on thin vellum at Ferrara by Lorenzo di Rossi da Valenza, in 1497

day by day, by persons not scholars and needing every assistance that the book itself can supply. The pages of this book are not all of the same character : a much smaller type is used for some of the “orders” and some of the “ministrations”; and again the Psalter and the Litany, being broken up into small verses of from two to five lines of the text each, have a totally different appearance. To consider a much more stately and much more precious form, take the Epistles of St. Jerome printed in Ferrara in 1497, and select a page which is full of the breaks and irregularities caused by illustrations and by decorative initial letters (see Fig. 182). It is not known by whom these woodcuts were designed, but they belong to a large class; indeed, they are not the most perfect specimens of that class, retaining a certain barbaric ineptitude with all their significance and character and their decorative beauty as designs. It is not to be forgotten that those outline woodcuts of the early days were intended primarily to be “painted,” as the children would say, by hand; so that the crude and unsatisfying system of line is not to be taken as the final word of the artist. It does not appear that this or another consideration can excuse the feeble creature who stands for St. Jerome’s lion in several of the cuts; call him an emblem, he is still very badly designed. But as to the consideration of the whole page, shown in Fig. 182, it is worthy of note how finely the three pictures, the

initial letters, the capital letters of the text, and the "lower-case" letters, which make up the body of that same text, are combined into one design. As in other arts, the printer leans very strongly upon the practitioners who have prepared his way for him; but in this case, at least, he also has done his work in a manly way. The placing of the woodcut illustrations he could not control, any more than he could their subject or their artistic treatment. The decorative initial letters were at his hand, to be chosen from among a small supply of different alphabets. It was his business to bring into shape the combination of these, sometimes conflicting, elements.

If, now, we would take a more elaborate page, let us consider the Books of Hours, the *Horae* of the sixteenth century; let us take that particular "livre d'heures," which was printed for Hardouin in November, 1503. Fig. 183 is one page of that book. The initial letters have been painted in by hand as suggested above in connection with Fig. 181, and in the photograph these make ugly blots; but it was in this way that the early printed books were commonly made decorative, and the volumes are counted by hundreds which have blank spaces left for the initial letters which the artist was expected to put in with color and gold. The combination on one page of descriptive illustrations, and decoration, with borders and letter-press, has never been worked out in a more satisfactory way

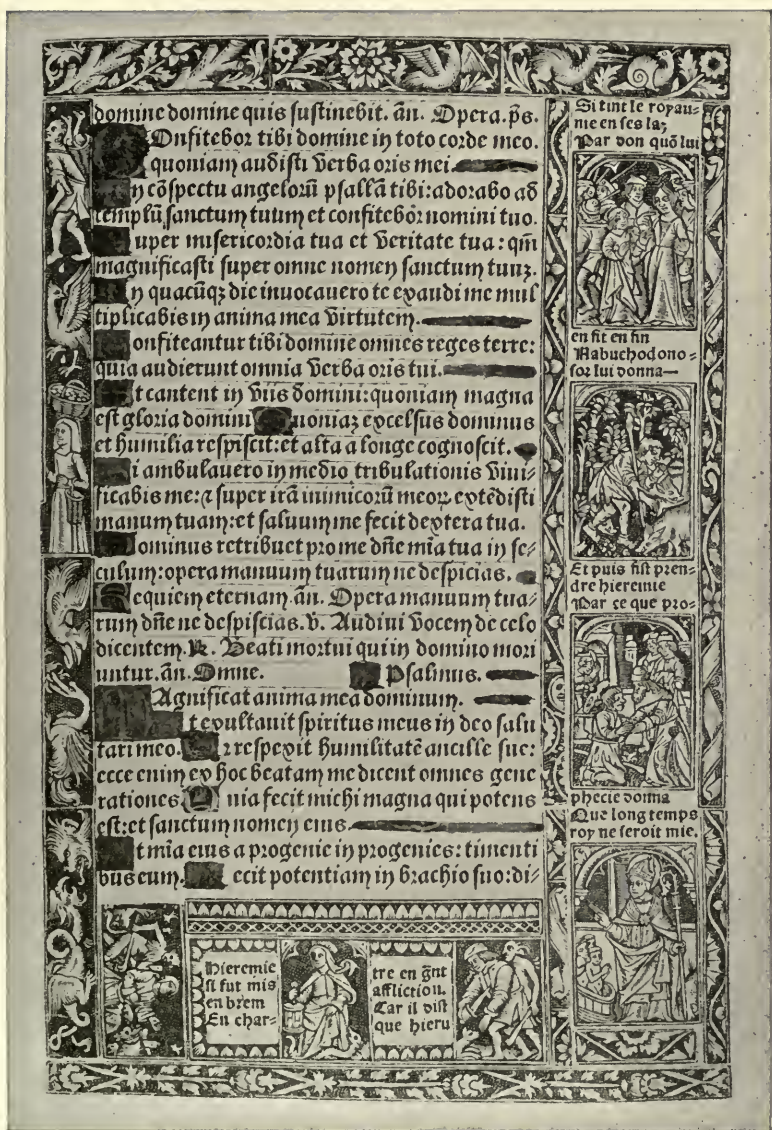


FIG. 183. Page of Book of Hours, "heures à l'usage de Rome," printed on vellum, at Paris, for Hardouin, 1503. The black patches are from the red and blue fields of initial letters and ornaments put in with gold paint

than in these Books of Hours; and this is true, although there is a certain clumsiness about the figure drawing not to be condoned in the work of an epoch so instructed and so artistically minded.

The manipulation of printing from type is not usually very elaborate. Once the type and the cuts are "set up," the printer has still to contribute care and reasonable watchfulness; and even what we call perfection in printing does not take you far. Still, however, the most interesting printing is that which is done "flat"; just as the most interesting woodcuts are those which are too simple to need overlays. Fig. 184 is a page of a Processional of the Dominican Order printed by John Emericus in Venice, in 1494. The book is printed throughout in red and black. In the page before us the words "Dixit martha ad iesum," in the last line of the first paragraph, are black, and so are the musical notes, the words between the lines of music (except the initial letter C), and the woodcut. The body of the text, the musical lines, and the initial letter above mentioned are red. The stout little book, of one hundred and forty pages, is printed throughout in this rather elegant way; the effect of the vivid red and deep black, contrasting and well set off by the yellowish paper thick and opaque in quality, is extremely decorative. Of course the purpose of the contrasting colors is to help the eye of the reader, who, as he reads, must march and chant;

but its artistic effect is not the less marked, nor the less evidently felt by the printer.

Consider, however, the printing of a "dry-point," that is to say, of paper impressions made

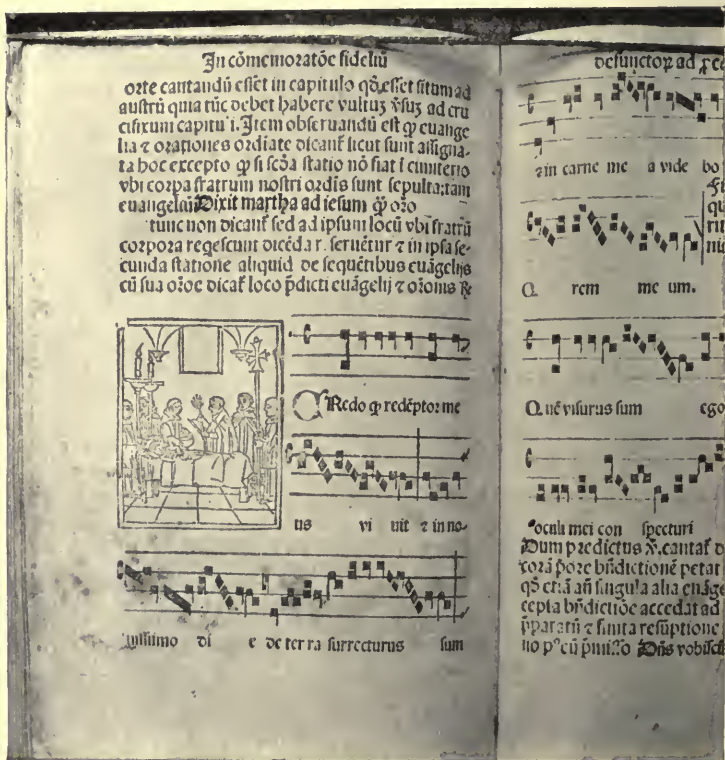


FIG. 184. Processional, printed in two colors, requiring two separate printings; page seven and one-sixteenth inch high

from a plate which has been worked over with the needle ("etching needle" as it is commonly called; see Chapter XIX). Whether without the use of other appliances, or as a final comple-

tion after the acid has done its work, the burr left by the scratch or cut of the needle forms a ridge all along the edge of every furrow which it has made, and these ridges retain the ink when it is applied by the roller or dabber. This ink is transferred to the paper as readily as that which lies in the deliberately cut incisions, and it gives to the print a singular bloom greatly affected by collectors. Now, the printer has need of great skill to rightly utilize this means of effect; but he is accustomed not to stop here — the ink can be transferred to the paper in still another way, a more arbitrary way, which lies entirely in the hands of the printer. This involves the leaving of a certain amount of ink on the flat and polished surface of the plate; wiping it off, not by a completely acting soft cloth, but by a stiff piece of linen or canvas, by the judicious use of which the ink is removed in part, but also left in part, in certain rather delicate and unexpected smears, which transfer themselves to the paper in subtile gradations of black and white. It is evident that no two impressions taken in this way will be exactly the same. One of Haden's dry-points exists for us in six or eight impressions only, let us say; it is quite certain that if those six were compared, each with all the others, it would be found that no two were sufficiently alike to avoid notice as peculiar, individually. It will be seen, then, that the printer

is for much in the preparation of such works of art as these.

The preparation for printing from delicate modern woodcuts is more elaborate, and demands a very perfect sense of the artistic significance of the design in light and shade and in line. The early proofs from the block will have been taken by hand with extreme care in distributing the ink, a process which is greatly aided by the use of the naked hand, putting on with the finger-tips and the cushions of the palm the additional thin layer of ink which given parts of the cut seem to require. Delicate manipulation — that is all ; but in delicate manipulation there is much of fine art, for in it lies half the secret, half the characteristic nature of the work of art as distinguished from the work of mechanical sort. The superior value of such an early impression over those which come later is indeed largely in the uninjured and unworn state of the block, or in the use of the original block in place of the electrotpe plate made from it ; but also in the additional care given to these early impressions.

Once the earliest satisfactory proofs are obtained, and the block, or the electrotpe from it, pronounced fit to print from (*bon à tirer*), the desirable rapid printing with the type-set page requires a fresh preparation. What are called “overlays” are cut. These are small bits of paper so shaped that they correspond with all those parts of the

cut which require a strong, dark printing. These are used single, or two deep, or even three and four deep, and, of course, the uppermost will differ much in size and shape from those below, in every pile. The cutting of these overlays is one of the most delicate bits of work not generally called artistic that we know. An extraordinary ability is required for the wholly fitting preparation of this reinforcement, and its adjustment to the impression surface of the press just opposite to and corresponding with the wood-block or electrotype.

With line engraving, "engraver's proofs" may be taken from the plate long before it is finished, and in this way an impression of it, very necessary to the engraver as he works, is to the amateur a mere curiosity — something to compare with an impression from the completed plate. But for the serious student of art, the careful printing and the unworn lines are much, and no lover of engraving is insensible to the beauty, apart from all rarity and all sense of pride of possession — the beauty to be seen in a fine "engraver's proof." The collecting of "states" of a print may be an abuse, and, indeed, we respect the artist who says, "Twenty copies only, all equally good, and then I destroy my plate"; but still there is some meaning in the excitement over *remarque* proofs, artist proofs, proofs before letter, proofs with open letter, and proofs simply so called; for all these distinc-

tions point to a recognized superiority of one impression to another.

It would be curious to ascertain whether the printing of the Javanese upon cotton cloth, or the printing of the South Sea Islanders upon fabrics of thinned-out bark, are also capable of degrees of excellence of impression. Chapter II deals with those printed surfaces, and examples are given in Figs. 3 and 6. Does the old-time chieftain in Samoa glory in the possession of a better printed piece of such cloth than his younger fellow-chief can show? In those Japanese silk robes where a woven pattern in full color has been helped out by printing on the finished surface, apparently from wood-blocks, is the garment printed by one special workman especially admired? To one who watches a printer of wall papers at work with his large flat block, secured by a cord running through a pulley overhead and counterbalanced by a weight, which block he sets down hard again and yet again before the color dries, carrying on the printing in one color, which may be the only printing which that design requires, but may be, equally well, only the beginning of the work (compare what is said of the use of the stencil-plate in Chapter XX), it needs only to watch him for a while to see how much room there is for greater or less care and even artistic manipulation, in such printing. The ruinous effect upon these arts, of Fashion, which prohibits

the offering for sale of any decorative material more than a year old, prevents, of course, care in the printing as well as thought, patience, and the employment of first-rate talent in the design of the patterns themselves.

The most elaborate printing is that done for the production of a polychromatic result. For this work there must be several blocks prepared if the printing is to be done from the woodcut; several stones in the case of chromolithography; several metal plates in the case of such delicate color-printing as was done in Europe in the eighteenth century. There has to be a block, a stone, or a plate for each separate pigment; but not necessarily one for each color required in the finished print, because the pigments may be printed one upon another, producing new colors. There has to be, however, a guide or key, — a block or stone or plate upon which the whole design is engraved in an outline more or less elaborate. If four different pigments are to be used to produce the color effect desired, there will be five blocks or stones or plates.

Wonderfully rich and varied designs can be produced by a very few separate pigments. The most artistic results are those obtained by the Japanese; and it does not appear that their workmen have ever employed many different colors in the same print. They use, however, several decorative appliances which Europe hardly accepts.

Thus there is no objection in the mind of a designer of the Far East to points and dots and clouds of metallic appearance. Again, a set pattern may be printed in bronze powder, or the like. Frequently, also, the Japanese use mere impression without color, getting slight relief in large passages of a color design. Thus a white crane will have his plumage expressed by what may be called blind printing, large parts of the surface given to the bird's body and wings being stamped with the ordered arrangement of feathers. The sixteenth-century art of Europe included a beautiful system of printing in two or three colors. The printing was done from engraved blocks or rather planks of wood, and the colors were very cool and quiet. The modern name for such pieces of work is, "prints in chiaroscuro," — a curious misapplication of the familiar term. A design will be rendered in two shades of gray and a third shade so light as to be practically white, with outlining and reinforcing in black. Again, a design may be in warm shades of brown. Large paintings by celebrated Venetian artists and others were copied during the sixteenth century; but the most interesting pictures are those which, like the Japanese color-prints, are independent — designed expressly for the print. The art languished; but it was revived by an Englishman, John Baptist Jackson, in the eighteenth century; and his work includes enormous prints, four feet long in some

cases, and worked on two or three sheets of paper each.

The art of chromolithography was introduced about the middle of the nineteenth century. It will not be practicable to describe the process here. Its complexity may be illustrated in this way; water-color drawings of minute accuracy, intended to preserve a record of beautiful ancient polychromy could not be reproduced adequately in chromolithography except by the use of eighteen stones. The single matter of registry in such a case, that is to say, the exact fitting of each block of stone or plate exactly to its place, will readily be seen to be of great delicacy and difficulty.

Chapter Twenty-Four

REPRESENTATIVE SCULPTURE AND ITS KINDRED ARTS

THE workroom of the modern sculptor is mainly a place where modelling is practised (see Chapters III and IV). Casts are made from the clay model, and these casts, usually of white plaster, a material which can be trusted to keep its shape, represent the full intention of the artist. It is in the plaster that the most important pieces of sculpture are exhibited in the great centres of comparative study — at the annual Salons of Paris, as at the universal exhibitions. For the final embodying of the work in more permanent material, the marble is carved by others than the sculptor himself or his own regular assistants; the bronze is cast and finished in a foundry specially organized for that purpose. The professional sculptor's occupation includes the preparation for and the supervision of these secondary processes, but his art is, in modern times at least, almost wholly the art of modelling. This is not necessarily an evil to the sculptor as workman or as artist. The copy carved in stone or cast in bronze will be of exactly the same size as

is his own model, from which, or from its cast the copy is made; and, therefore, every artistic thought embodied in the rounding of the surfaces, or the sharp edge given to a fold of drapery can be reproduced without modification.

The process of using a mechanical appliance to enlarge or diminish in size the work of sculpture as originally designed has nothing to do with this form of mechanical copying. That process is much used by sculptors, even the best and most careful; and as a preparation it is altogether good. The first model of a group may be of figures a foot high; the second of four-foot figures; the marble group may be designed for heroic or colossal size; and the mechanical enlargement merely puts before the sculptor his original work under changed conditions. It is for him to modify it, then, because the enlargement will show at once that it needs modification. The little figure made very large will never do, without change. Moreover, the artist will, almost of necessity, give his own personal attention to the last touches upon the work in marble or bronze, as he has done to the plaster cast from the clay model. This personal supervision becomes especially important when the marble or bronze is to be set up in a light and an exposure very different from that of the studio and the gallery of exhibition. Suppose that the work is set up in the open air; the artist will examine each part of it, each figure and each

detail, from near at hand and from far away ; he will direct and oversee changes of every sort, — a slightly deeper shade to be got by cutting deeper in a fold of drapery, a slightly softer gradation to be got by a diminished convexity. In this way the finished marble or bronze may grow into something different from the plaster as exhibited ; but this is not the rule, nor are the changes here suggested such as would reveal themselves commonly to the spectator. The danger is rather in diminution, in reducing the size, than in enlarging ; for the practice of modelling a medal in a plaster disk, two feet across, diminishing it mechanically to four inches, and then leaving to a die-sinker who is not a wholly sympathetic artist the task of producing the intaglio demanded, is a most dangerous practice. For that work, see Chapter XXI : the sculptor of life-size and larger figures has little to fear from the machine.

What is against the sculptor's peace and satisfaction in his art is mainly the Studio Light ; the strong pure north light which falls directly from the sky upon his work as it approaches completion. It cannot be dispensed with ; for it alone is a continuous and unchanging light, the same all day long and every day, except in mere brightness ; while the walls around are dusky, and but little reflected light from any quarter comes to interfere with this strong bath of colorless illumination. Those will not be the conditions in the drawing-

room, in the park, in the street, in the niche by the doorway, on the pedestal in the carrefour with trees around and with the houses well away; nor will they be the conditions even in the museum, though the ordinary sculpture-gallery imitates the studio light but too well in its provisions for illuminating the exhibited works of art. At least one living American sculptor has arranged in his country studio a short railway, upon which even his heaviest figures and groups can be run out into the open air. Another has huge doors which can be opened to let the strong beams of sunlight into the room. Other such devices, even to the use of large mirrors, are known; and all illustrate the subtle feeling of the artistic spirit, and the sculptor's sense that something must be done to check the too concentrated attention, given by himself and his aids, perhaps through many days and weeks, to the modelling as seen in the studio light.

The artist in pure form has need of abundant space, not only for the occasional working of very large pieces of sculpture, but also because of the necessity of storing ready at hand casts of what he has already done, or of parts of what he is engaged upon; and because he must be able to modify his too concentrated north light by having the opening for its admission at a certain considerable distance from his work. The farther the window is from the model upon which he is working, the

more is the light broken up by reflection from the walls, the casts, the draperies around, and the more nearly it approaches (though never near enough) the conditions of out-of-door light, or of that under an open portico. There must be, moreover, free access from the studio to the street, and this because of the necessity of admitting a horse, now and then, and of carrying heavy casts in and out, without the necessity of mounting stairs. Then, as the room is used continually for rough work with great masses of wet clay and tubs of water in which clay is set to steep, and as there is much splashing and dropping about of the material which is called in studio slang "mud," the sculptor's studio is not the refined and ladylike place which the studios of many painters grow to be. Even if there is a carved cabinet against the wall and some pieces of armor lying upon it, these will be there with an apparently temporary purpose, and are hardly used to adorn the room. The sculptor and his assistants work in *blouses* and *sarraus*, or in complete washable suits not wholly unlike the fatigue suits of privates in a cavalry regiment. The work to be done is continuous and hard, and every man engaged in it must work like an apprentice; as is said of midshipmen at sea, they must put their own fingers into the slush bucket. The tools used by the sculptor are extremely simple. There are many of wood and also of iron, their use being merely to aid the

use of the fingers. A straight-edge scrapes away the clay faster and more completely than the fingers would; the deep cleft or groove between two folds of drapery is marked more deeply and more swiftly by a pointed tool; the rounding of a cheek, once determined on and approximately modelled by the fingers, may be perfected by a tool which has at once an edge and a smooth surface. Any one may try it, from the child making mud pies to the amateur with a lump of wax which he softens gradually by heat; when the fingers are found unfit or inadequate for a given purpose, the end of a match or the blade of a knife, or the bowl of a spoon may be called into requisition, and the next thing will be to have a stick shaped more nearly to the workman's fancy.

One thing to be noted is that the clay model is liable to constant deterioration from shrinking and cracking if it grows dry, and for this reason, unless some such device as a mixing with glycerine be employed, the clay must be sprinkled continuously. For this purpose a powerful squirt is in constant use. This does not apply to delicate work in wax, of which there is mention elsewhere. Wet clay, being so readily moulded into shape, is a material which is only too easy to handle, and the immediate result is that the hand sometimes escapes from the more deliberate control of the mind, and that a surface is produced, or a whole figure shaped, which gives but little satisfaction to

the artist the next time he takes the wet sheet from off his work. From this it results that the model is continually in the way of being destroyed and remade. This applies to relief sculpture and to sculpture in the round, equally. In the one case, that is, when there is in hand a bas-relief or a high relief, the operation may indeed be different from that of setting up the model for a statue; but the same kind of piling up and sticking on of handfuls of "mud" is constantly in evidence. In dealing with the bas-relief a plank or slab of slate or glass may be used, and the clay piled up on it; but a background must not be spoken of as if it were an absolute thing. It is seldom an advantage to have a perfectly smooth and uniform background, except in purely decorative pieces, like the panels of the fine doors of a cabinet. The moment the human figure, and especially the human figure in apparent action, is to be treated, it becomes an almost inevitable condition that the background should be of different depths beyond or beneath what may be called the original or normal surface of the slab or panel. Consider Fig. 185, in which it will be seen that the architectural screen, the semblance of a porch with arcades in perspective, which shuts in the composition and limits the action of the figures, itself forms the background for nine tenths of the whole surface of the panel. Beyond this, on the right, and above it, is what stands for the sky, and that is, of course, flat; but

below, the rocky hill and a tree upon it rises from that flat background and affords in its turn a background for the single erect figure on the extreme



FIG. 185. East doorway of Florence Baptistery, middle panel of left-hand door : by Lorenzo Ghiberti, about 1425

right. In that very elaborate panel of the same doorway in which is shown the falling of the walls of Jericho, Fig. 185 *bis*, the background is still more broken up, for it can be definitely stated that there are four planes in that background at

four different actual distances from the front, and representing four natural distances very greatly removed from one another. The point to observe is



FIG. 185 *bis*. East doorway of Florence Baptistery, fourth panel from top of right-hand door : by Lorenzo Ghiberti, about 1425

that there is no saying where the background leaves off and the composition begins ; here as in many important bas-reliefs the composition fills almost the whole of the slab of bronze or marble, and one part of it is background to another. The practice of different sculptors will be immensely

different in this respect, and, while the one loves broad, smooth surfaces upon which his figures are sharply detached, another crowds form upon form, repeats curve by curve, echoes mass by mass, and allows himself as much depth or, what is the same thing, as much projection as he may please, in one part or in another part, without regard to hard and fast rules of propriety. A work of art familiar to most Americans, the celebrated monument of Colonel Shaw, by Augustus Saint-Gaudens, exemplifies this well, for in that design a mounted man, Shaw himself, is shown larger than life in the extreme foreground, relieved against the irregular, the embossed, the strongly modulated surface composed by the files of his marching men. It appears, then, that the sculptor who is setting up the clay model of an important bas-relief, large or small, or of an alto-relief of no matter how great projection, begins of necessity with a plank or screen of planks, the surface of which is prepared or covered in such a way as to afford a good hold for the wet clay, and that then with his plastic material in hand he piles upon the even surface so prepared, here a mass many inches thick and of no great superficial dimension, there a broad thin layer in which are to be indicated the slightly marked ridges and hollows of a supposedly distant hillside and the trees which crown it, and which will be in very low relief. Or, if the relief sculpture is to be applied to a

generally rounded surface as of the cup, Fig. 186, then the clay which is to form the rounded body may be turned in the lathe or on the potter's



FIG. 186. Silver cup, Greco-Roman work, Naples Museum

wheel, and the sculptor while he is piling up his modelling-wax may find it necessary to cut away some part of what had been at first his background. Something of this may be noted in Fig. 7, where the ivory box has been shaped first, and the panels sunk afterward, the sinking or intaglio-cutting so contrived as to leave in relief the pat-

tern of waves, clouds and rocks, and the group of warrior and dragon. Again, in Fig. 13, the scene of water and boats, rocks and trees, is in relief in a panel. Now, of these two decorative pieces the former is really a piece of concavo-convex sculpture, and should be compared with the Egyptian relief, Fig. 12, and with what is said on page 42; while the panel shown in Fig. 13 cannot be so classed. Now, whether these designs were first made in plastic material or not, is unimportant; if the studies were not made in clay or wax, that could be only because the carvers in decoration had become so very skilful, so armed with swift and rapid dexterity of mind and hand, that they could work directly upon the carving, as Michelangelo is said to have done. So with the European bas-reliefs shown in Fig. 9, the sculptor may well have made several portraits of King Henry, in relief and in the round; he may well have learned by heart the details of ruff and doublet, and the great collars of the orders, and so have done his carving in this instance without a modelled original; or again, a single model in some soft material may have served him for several slightly different carvings, small and large, in ivory and in oak. All this time, as he has in mind the subject in its usual sense, the figures in their determined action and the hills or towers of the distance in their determined place as part of the bronze or ivory reliefs, or, in the cup, the

foliage and small branches, he is also keeping in mind the matter which is to him of the first importance, the resulting beauty of the masses of projection and the contrasting hollows or recesses between them, their smoothness, their roughness, their gentle gradation of surface, their bold contrasts of surface, and the play of light and shade over all. It is clear that while the sculptor is at work, great fragments of the clay or the wax will often be torn away and thrown impatiently into the *baquet*, or kneaded again into the residuary lump.

And so in the case of the statue; the sculptor will wrench a whole arm from a seemingly complete figure, or will confiscate the head, or throw the whole mass of clay down and begin again at the very foundation of his structure. There is, however, this check upon the freedom of his handling, that all large, free-standing pieces require an armature of iron which acts as a kind of skeleton to the future body. In the case of a statue set in a position expressing some decided movement, this armature may be somewhat complicated. It is not long since there was published the picture of the preparation for some statue of Victory, a colossal work in which the goddess was to be represented as moving rapidly forward, her drapery flying about her, while she held in her hands almost at arm's length from the body, two great wreaths or crowns of reward. The armature for

all this was a set of iron bars, one with various angles in it standing for the mid-line of the body, two secured to this and making still bolder angles to serve for the legs, two others stretched out from a point near the top of the central rod and serving for the arms, while the wreaths, completed with all their laurel leaves and berries already in place, were hanging from the ends of these where the as yet unmodelled hands would come to grip them. The head was represented by a couple of rings, horizontal or nearly so, a smaller one above and a larger one below, set upon the largest central rod. It is often the case that the artist, having made himself somewhat sure in advance of what his surfaces will be, desires a more complete armature than this. A "key" is wanted; something to hold in its place the wet clay of the model is needed here as in the bas-relief; and there is difficulty in securing it. Perhaps he has each separate large iron rod fitted with small projecting or nearly parallel pieces to afford a firmer hold to the great mass of clay. Upon this armature, whatever may be its form, the clay is built up rapidly, and for this the hand of a beginner in sculpture may be trusted; he having always before him the sculptor's own small model, as explained below. Any fairly careful and observant pupil may, in the case of a large piece, do much of the preliminary work. The sculptor's own task upon the large model begins when, the masses of clay being

somewhere near to their future size and shape, he must begin to reduce the excessive mass to that which is required, finding in the mass of clay, as Michelangelo found in the block of marble, everything that the sculptor's thought could create.¹ It is there somewhere within that rugged lump of clay, — the rounded form that the sculptor wishes to give to the shoulder and the upper arm. It is there, but only to be found in connection with all the other neighboring parts. The wrist will not come right until the whole arm to the elbow is modelled, nor either until the hand is rightly attached and its main forms secured. All has to go together. Nor is there a single *méplat* ² which is not in some way affected by the neighboring surfaces and even by those surfaces which are not so near. Nothing is satisfactory, nothing is right, nothing can be thought of as embodying the artist's idea until all is complete; and the sculptor is only enabled to go on with his work in spite of the discouragements of the as yet unfinished and disagreeable surfaces, because of the distinctly seen image which his mind holds, through all

¹ “Non ha l' ottimo artista alcun concetto
Ch'un marmo solo in se non circoscriva
Col suo soverchio, e solo a quello arriva
La man che obedisce al intelletto.” — *Harford*, ii. 142.

² *Méplat*: in French, a slightly rounded surface; a convexity so slight that it approaches flatness. In sculpture, most commonly a part where the rounded surfaces grow flatter, as in the cheek.

the discouraging physical circumstances around. The mental image must be a more plainly seen thing than even the masses of clay which he is impatiently, or perhaps even with discouragement, manipulating and trying to subdue to his will.

But is there nothing to help in the perpetuation of this mental image? There is always something. "Sculptors' drawings" are a favorite subject of friendly ridicule by painters; and yet a sculptor's drawings preserve for him his first and his later purposes—the different steps in growth of his design. To most sculptors the small model in clay or in wax, or represented in a more lasting material, is of infinite value. It is shown elsewhere in this inquiry that the treatment of a statuette will of necessity be different from that of a life-size statue, and again from that of a colossus; but the small model made for a life-size statue or a colossus is not to the artist a statuette. It is a memorandum made to help him recall in times of trial and of future effort the thought which he had when he worked this foot-high figure in wax.

And it is noticeable that the same sculptor who is indifferent enough to accidents which may befall his as yet unfinished great model in clay, will be as uneasy as may be if injury threatens his wax model of six months before. Let that be injured, and something of his old thought, some-

thing of his original scheme will have been taken from him, nor can he risk the marring of such a sure memorandum of his primary design.

The almost incredible tales that are told of Michelangelo's swift and rapid work with the marble itself, chipping vigorously, with large pieces falling around him, and his chisel going perilously near to the innermost surfaces admissible in the proposed statue, all presuppose the existence of a guiding model. It is just conceivable that a sculptor who was altogether sincere and in earnest, with his mind absolutely fixed upon his work, and with a natural and a gained ability equal to anything that he might attempt — it is just possible that such a workman would do his final modelling in hard material, and with the edge of the chisel, instead of using the wooden scraper in soft clay. But to imagine this we must imagine also the small model standing very near him ; resting on a turn-table constantly reset at a new point ; a model of his own preparation, and which, at least for him, would contain the larger work of the future. There is an unfinished piece in Florence, ascribed to Michelangelo, in which the block of marble is so far cut away that about one-half of the human figure emerges from it, but not the upper half or torso, nor the lower half, the thighs and legs ; it is as if the whole figure from head to feet had been worked in relief. More accurately it is as if the block of marble were considered as a trough full

of water or rather of an opaque liquid, from which just so much of the figure emerges as was thought easy to work by itself in this partial way. Tradition has it that this was wrought by Michelangelo's own hand, and that this way of allowing a figure to emerge slowly, sidewise, as it were, was a not infrequent process with early Italian workmen, who in this way would be led to keep their design "well together," to give it massiveness and a kind of stony dignity without which, as those great artists truly felt, monumental sculpture was lost. At all events, the process of getting the full-size work out of a mass of clay or marble by modelling, or by carving, indifferently, is well exemplified by the existence of this piece and by the traditional stories about it. It is in this way that the human figure hidden somewhere in the mass of lumpish material is gradually brought to light ; and it is evident that not even the greatest sculptor could hope to achieve this were not there before him to recall him to himself, to check and stimulate at once his artistic memory, the model into which his earliest conceptions had been wrought.

As to the question how drapery, in the semblance of clothing of any sort, is added to the nude figure, the proposed treatment goes far toward determining that,—the artist's individuality, still farther. Take a decorative statuette: it is not to be supposed that one of those terra cotta fig-

ures which come from Tanagra or Smyrna, dating from the fourth century B. C. or one of those given in Fig. 187, was modelled first in the



FIG. 187. Terra cotta statuettes, Palermo Museum

nude, and then covered with the clay ridges and flats which were to serve as drapery. No ; the little image was, in its composer's mind, a single ornamental object ; he started with the carefully moulded head, and worked swiftly downward,

cutting the mass of clay at the right length, and breaking up its surfaces into the seeming folds and groups of folds as was agreeable and significant. So in modern times: the "clock-top" group may be wrought into shape by the swift intelligence of hand and eye, and a living model consulted only for the truth of some doubtful pose. Indeed, this may be done with the life-size statue also; but this must be stated as the essential fact, that all modern academic teaching tends to the uniform practice of completing the nude statue, even to minute details of the form, modelled with constant reference to the nude living model; the drapery of garments added in clay, with study of the living model similarly clothed; and so on to the end. There is a certain feeling of professional pride about it; the painter also desires his *confrères* and the public to know that he draws every figure nude and then clothes it. Assuredly this is not the only road to good art; but it is the road now most followed.

Coming now to the question whence the artist derives the figure — the form of significance and beauty — which, as we have assumed, he sees in his mind, which he embodies in a small model of his own handiwork, and which finally is, with minor changes, wrought into the large piece which he proposes to exhibit and to announce to the world as his deliberate and finished work — we enter upon a subject which is not capable of

precise explanation. It is more easy to show, in the chapters concerning painting, how great is the diversity in the mental process between artists (see Chapters V, XX, and XXV). The sculptor's work though simpler is still recondite enough, and while there are greater varieties of conception and a far more widely differing process among the painters than among the sculptors, yet the sculptor also is an artisan with instructed fingers, with trained habits of eye and of hand, with far more capacity for doing than for telling you what he is about to do, or what he has done, and in short a workman who can hardly explain in words what his work has been or might be. Thus, as regards the obvious and interesting matter of the use of the model: the writer was present when a theoretician in all matters of fine art, an enthusiastic realist, asked of a popular sculptor whether his groups, which were sold by scores, were modelled from the nude figure first and then clothed; a question to which the answer was that no living models at all, nude or clothed, were used. Questions and answers followed this surprising statement, but it appeared that the theoretician and the practitioner were wholly at odds as regards this matter, and that to the workman and maker of popular groups the theories of his interlocutor were impertinent—that they had nothing to do with the subject. It was unfortunate for our questioner that he had come up against a work-





FIG. 188. Statue, *La Foi*, belonging to the monument to General Juchault de la Moricière, by Paul Dubois : from the plaster as exhibited

man whose work he could not admire heartily. If he had found that the same case held good in the matter of some piece of sculpture which he could not but respect, his hard and fast theories might have been loosened up and made more generally applicable to the facts.

The matter of the use of the model must depend enormously upon the habit of mind of the sculptor himself. It is not very long since the writer heard an eminent sculptor denounce the habit of using the living model in the making of the first sketch, but that same artist had been in the habit of making models of things that he had seen and wished to perpetuate, heads of unusual type, groupings which he had seen for a moment in the swiftly changing crowds of the street, other groupings which the football field had suggested to him. "But these were studies!" Yes, they were studies, and every artist makes studies, the only question being whether the model which he makes as the first step in a deliberate composition shall be a study also, or whether it shall be rather the result of a long series of studies, the putting into solid form of a conception of the mind. To be very accurate, let us suppose the sculptor to have imagined such a figure expressive of the idea Faith, "La Foi," religious faith in the supreme object of worship. The photograph Fig. 188 shows the final form given by Paul Dubois to this conception; but the question is now of the form

first given, and how it came to be put into the solid.

It is evident that, to the greater number of able sculptors, the task would seem more simple and natural if the figure were put into form without the use of any living model at all. As the designer for book illustration would hastily sketch his first conception and then a modification of it, perhaps destroying the first one, and that without even looking up from his paper for a living figure from which to take guidance, so the sculptor would throw into clay the general lines of the figure which he had in mind, and that primarily with the idea of seeing whether those lines — those surfaces, that solid block of matter — would be as effective to the bodily eye as he had seen it in the eye of his mind. Let it be remembered that the sculptor wishes to express the idea of religious enthusiasm, and that what he is in search of is such a pose combined with such an expression of face as will convey this idea to the spectator. It seems evident that the living model would not often be called in for such a preliminary step as this. But suppose the case of a purely decorative figure, one in which no particular sentiment is to be expressed, although it may be called Patriotism, or else may be considered as the ideal portrait of a patriot. In this case, the lines and masses of the composition being everything, stateliness, unchanging calm, firmness of

pose and severity of drapery being the absolute requirements, it is entirely within the probabilities that a model should be consulted from the beginning, and the sculptor's dream of such a dignified figure would need to be checked and also to be inspired by the sight of the living body itself, first nude, then draped.

A similar doubt hangs over the other question, how far the model is used in the final work on the full-size composition. To one sculptor the constant presence of the model in the pose of the statue seems essential — he will take hardly a step without it. Nor is there any reason to consider such an artist as inferior to him of greater rapidity of conception. It is quite conceivable that in the next room to this man there works another who finds the model a nuisance, a restraint upon his earlier strivings, and who puts in the first day's work alone in his bare studio. Of these two men the one may be stated to use the model continually for the suggestions of his first hours' work as well as for the inspiration of his final refinements of touch, while to the other the model is rather a check, a correction, — something to call in, not at the eleventh but at the second hour, that the work of the first hour may be compared with nature and a new life given in this way to the composition. It is not wholly unlike the work of two historians, one of whom throws on to paper at once what he knows already with-

out seeking for further knowledge until he has fairly settled himself with a clear perception of what is already known to him ; while the other never begins to write until he has spent months and years in minute research in comparatively new fields. To the one workman it is a pleasure to put down what he knows, that he may by a natural process of deduction discover what he does not know. To the other the instinct is to get his material together, because his thoughts do not begin to flow aright until he has supplied the reservoir afresh. The two men will never work in the same manner, and it is a waste of time and of human energy to try and reduce the practice of such differing minds to a common standard of work.

The essential thing is that the living model shall not influence the sculptor too decidedly. The moment his work is in any respect a portrait of his model it is — not ruined necessarily, but — removed from the plane upon which the great works of art may be thought to exist. Fortunately it is not human to make an exact copy of anything. Fortunately for art, the artist's mind works away from exact copying and toward giving, not the facts of form and surface as the model shows them, but his own impression of those facts and his own thoughts about a more perfect result than those facts alone would supply. Fortunately even the most fervid realist, the most faithful

student of the facts of nature, is as morally and mentally incapable of reproducing those facts as the avowed students of the opposite school. There is a misleading picture sometimes reproduced, a representation of a sculptor at work with the nude model seated beside him, while he, the sculptor, is copying with evidently minute care the modelling of the living body, his eye on the living limb which in the clay his scraper is modifying. Even if this were an instantaneous photograph from an incident in a sculptor's studio, it would still be misleading. The assumption too readily taken up by persons unacquainted with the artist's way of work is that the sculptor simply copies a living body. That this is not the case is sufficiently proved by the enormous difference there is in the work of sculptors living at the same time, of approximately equal power and standing, and furnished with exactly the same models. Manner, as it is called, the artist's own manner, a personal peculiarity which makes the work of a dozen men living and working side by side in the same town recognizable each among all the others, distinguishable each from all the others — this manner, upon which so much depends and which for good or evil is the most important thing in each artist's work — this is the convincing assurance to the world that the artists we are discussing work to reproduce that which is seen by the mental eye, and not directly

that which the pointing machine would transfer from flesh to marble if it were set to work.

For these reasons the sculptor is always to be congratulated when he has some purely decorative



work given him to do. Fig. 189 is one of those so-called "Dancers," the stately maidens who once stood, in bronze, under the colonnade of the famous Herculanean villa. It is evident enough that such a piece is modelled on the same principle as the terra cotta figures in Fig. 187 — though with how different a significance — in how different a spirit! So, in the peerless portico of the Erechtheion:

FIG. 189. Bronze statue found in villa at Herculaneum, now in the Naples Museum
(From Rayet)



FIG. 190. Caryatid from the Erechtheion
at Athens, now in the British Museum
(From Rayet)

one of the maidens alone (Fig. 190) may show, even better than the whole composition, how greatly the sculptor thought in the way of pure design—how very little his model in her individual form and habit of movement or of pose, influenced his work.

Moreover, a too close dependence upon the model works also against the true interests of the sculptor's art, in that it involves the study of the immovable figure only; and that figure not one which unconsciously stands or reclines in a suggestive or simply a dignified attitude, but one which is deliberately posed. The difference between professional models in this respect is very great, and there are some who have a natural fitness for the work and become capable of giving a singular naturalness of aspect to their fixed attitudes; but it is a fixed attitude still. If the sculptor had to represent a series of young women marching in a ceremonial fashion, carrying merely utensils of ceremony, he would hardly expect to succeed greatly by studying one living model, only. He would need several such models; and, moreover, he would need to see them move together, passing him many times, before he could begin to compose his bas-relief, as in the east front of the Parthenon Frieze; where five maidens, carry, the first, a symbolical pine-staff, so much broken that it is hardly recognizable, the next two, pitchers or jugs (phiali), the fourth and fifth, round platters.

No practised sculptor would think it easy to compose such a relief, or even to arrange the conditions for its proper study. If he had to introduce the procession of young men carrying weights on their shoulders like those in a neighboring slab, shown in Fig. 191, he would feel still more readily his weakness in that he had never seen that solemn procession climb the western approach to the Acropolis, the youths balancing each his jar of oil on the left shoulder. To put a model, nude or draped, into the attitude of one of these vase-carriers might be a task beyond his means, beyond the living model's powers. The sculptor might easily find it more within his reach to look at that Greek sculptured group until the scene recorded itself in his imagination, than it would be to go to some as yet unspoiled Pacific island, and induce a half-dozen vigorous young men to march up hill with loads on their shoulders that he might study them in action. He might readily find it for his advantage to cast each of his figures and decide upon its main masses in advance of the study of any living model whatever. This living model would be absolutely necessary to him, but only at a later stage in his proceedings, when the verifiable facts of the surfaces of the body and limbs, as this or that attitude was assumed, should become the immediate object of his thoughts.

Allusion has been made above to the difficulty caused by the fixed and concentrated north light



FIG. 191. Part of naos-frieze of the Parthenon, north face ; young men carrying jars : now in the Acropolis Museum, Athens

of the studio. The difficulty caused by the study of the unmoving live model is of a similar kind. The two together are for much in the explanation of the comparative dulness of so very much modern fine art, as compared with the vivacity and swing of that which we admire in the great work of the past. The example chosen above (Fig. 191) has been deliberately selected as half way between an absolutely fixed attitude and one expressive of rapid and vigorous movement. If the question were of the caracoling horses and their riders in the same frieze, or of the fixed attitude of the bearded god who sits nearest to the central group on the eastern face and still in the frieze, the same necessity of disregarding the living model *at certain times*, namely, at the critical moments when the pose itself is to be determined, will appear evident. Although the living model is allowed to rest, and this more frequently when the position is one difficult to maintain, yet, during the minutes of the pose, muscles relax, the intentness of the attitude is lost, the true significance of the body in the attitude imagined by the sculptor ceases to be present and visible. Granted all that has been said above of the sculptor's own "manner," of his way of showing things and of rendering things, that this his own manner of work comes to help him and to save the situation, the question is not now of what can be done by his mind to diminish the bad effects of the

constant use of the living model; the question is whether such constant use of that model is not itself an injury.

In the case of a group of human figures the danger of close adherence to the living model is still more noticeable. The pose of each of two figures who are taken as acting together must of necessity be different from any pose which a man or woman alone can take and maintain. It is almost inconceivable that such natural or acquired imaginative conception of the part can exist as might enable one figure of two to be studied exactly from the living model without change; unless indeed the two are posed together. In that case, however, in case the two figures are composed at the same time and as the group is to be worked out, the difficulty of maintaining that pose unchanged for an appreciable length of time is immensely increased. Take a design in relief, like the jar-carriers as shown above, Fig. 191; or a composition with two little children like Gardet's "Repose of the Child Jesus," how impossible in the one case to pose the young men at the same time, with their drapery, and the supporting of the jars rightly considered — how impossible in the other case to pose the young woman, the baby, and the two-year old child and keep them posed for a reasonable time — how still more out of the question it is to imagine anything satisfactory from the faithful copying of living models, one after an-

other, if their separate action be separately studied ! The intention is not here to criticise the proceedings of any sculptor who does or does not use the living model from the beginning ; the secrets of the studio during the early moments of a new composition are inviolable, and no one has a right to say what the way of work of any one able artist really is. All that is desired is that the reader's attention should be called to the extreme difficulty involved on the one hand in using the living model for the first preparation of the design, and on the other hand the difficulty of avoiding it in the later stages of the work, and substituting for such constant reference to life the sculptor's own memory of the facts of nature. The artist may indeed design his small original model without reference to life ; his memory for natural form may indeed carry him as far as that ; but few are those whose memory for form is so faultless that no solecism will occur in putting together two or three figures in a pose expressive of action, or whose sense of the possibilities of the body is so strong that full use will be made of its power to express grace and dignity.

All that can be confidently said is that the artist's design must of necessity be made without any close adherence to the physical formation of any living person whatever, while he is equally bound to consult the living model for the completion of his design — for the right articulation

of every joint, for the right setting on of hand to wrist and arm to shoulder, for the right posing of the head on the neck, for the right setting of the limbs when anything like vigor of action or any unusual pose is demanded.

It is true that the artist's chief anxiety is for the beautiful, the impressive, the significant in form, —in short, for the sculpturesque character of his composition, and that for the sake of it he will go far afield, will even disregard or boldly contradict some actual fact of the living model or of human anatomy. He will load on material here, he will scrape it away there for the sake of the shadow, for the sake of a gradation of delicate shade which will give him, as he thinks, the appearance of truth while the actual verity is ignored. All this he will do, and yet the same sculptor who is the boldest in the way of such liberties taken with his preliminary model, and the most confident of himself in letting these deviations pass into the completed work, will be the first to tell you that "there is nothing like nature." He means by this that without constant reference to nature the work that he is upon will lose its vivacity. He means that the actual surface of the living body or, though in a less degree, of the drapery which is attached to the living body, is the only final and general truth, and also the only complete standard of artistic beauty. Granted that no one living model that he can select, or no one

nude form that he can see at the swimming bath or elsewhere will at all closely approach his standard of normal and faultless beauty ; it is still from a study of those living models, inferior as each one of them may be, that the central truth of nature is to be found ; while at the same time this central truth is the one thing desired. We are reminded of the old comparison of the arrows shot at a mark ; the mark itself having been removed, its previous place was easily discovered by a comparison of the shots around it. Somewhat in the same way that which is the artistically perfect form of man or woman is not to be thought out abstractly, it can only be inferred, and, as it were, reconstructed from a non-existent perfect original to which the living models at hand approach more or less closely.

The use of sculpture for architectural adornment has become of late years common in the United States, the French practice of the nineteenth century being followed in the main. This practice is to set up pieces of entirely realized artistic subject, independent statues and independently designed groups in the round, and much less often bas-reliefs, upon a building which is otherwise entirely devoid of sculpture. In other words architectural sculpture as understood by the people of the European middle ages or of the Italian or the French Renaissance (see Chapter XXVI), with its abundance of conventionalized floral and

foliated work, its scrolls, its arabesques more or less closely studied from natural forms, and its free use of the lower animals, complete or in the way of heads and paws of natural or of preternatural vigor — even the much less abundant architectural carving of the folk of antiquity is ignored. The egg-and-dart mouldings and perhaps the anthemions of the Greeks are used, but generally the building is devoid of such ornamentation. It is of an epoch which cannot design such work afresh, and by a man who has a soul above copying it; and the building is left plain and bare, as a supposedly better background for free and completed sculpture of statue and of relief, which alone can be hoped for. Such sculpture as that is not conditioned very differently from that which has no such architectural purpose and which is in a sense movable. A statue set upon a pedestal in front of a pier between windows or between doors is not very much more architectural than one made to stand free in a park, and the two are interchangeable as to place. In the chapters above on modelling and on carving there is some allusion to the conditions of such work when it is strictly decorative in character, and is architectural sculpture in the sense in which Bramante or Michel Colombe would have used the phrase.

Coloring in sculpture (see Chapters V and XX) is of several kinds. There is first to be considered that of the natural material. When the Egyptian

sculptors, four thousand years before our era, worked life-size statues in the hardest obtainable stone, such as diorite, black granite, speckled red and black granite from Syene, and the like, though something may be allowed for pure desire of sacrifice, as to show the king or the divinity how much labor was spent in his service, the main object must have been the beauty of the veined and clouded coloring of the polished rock. Nothing less like humanity than a statue in black veined granite can be imagined; nor was it intended that it should look like humanity. The frequent use of the heroic or colossal size alone points to this truth. The sumptuous arts of the Roman Imperial epoch include a vast amount of work in colored material; the Capitoline Museum contains two centaurs worked in dark red marble; the Naples Museum contains many similar pieces, and every collection of antiques in Europe has Roman Imperial portrait busts (see Fig. 192) in which the head and neck of white marble rise from a draped bust and shoulders carved in some precious veined and clouded alabaster or porphyry, the folds of the drapery showing well the lovely veining of the stone. Artists of our own time have taken up the idea, and have made statuettes and groups in which ivory, white and stained, bronze of many shades, onyx, agate, and gold and silver, or metallic surfaces which pass for them, are all combined in a decorative result. Barrias' large

statue of "Nature Revealing Herself," described below, is of equally rich and brilliant effect.



FIG. 192. Bust, the head and neck of white marble, the draped body of richly veined marble. Portrait of Roman Imperial time, now in Naples Museum, called a portrait of the younger Faustina, wife of Marcus Aurelius

Cameo-cutting, as described in Chapter XXI, is a branch of sculpture, and it is quite the rule to treat this branch of the art in a polychromatic way. Cameos in hard stone selected for the beauty of its alternating layers of light and dark have been treated in the chapter already cited; but still more extensive works in this direction have been carried out in glass made expressly for the purpose. The magnificent vase in the Brit-

ish Museum, known commonly from the name of its former possessor as the Portland Vase, is of this character. It is about twelve inches in height, and is known to be of antique Roman work. The process used in producing it has been the coating of a jar of deep blue glass by a thick layer of opaque white glass, and the cutting down through the white glass, until the blue ground is exposed, so that the figures are seen in white relief upon dark blue. The vase in the Naples Museum found in Pompeii, is not quite as large, but is of still finer quality as a work of the sculptor's art.

Color is also applied with the paint brush, and if the whole mass of carved objects produced since the beginning of time could be brought together it would perhaps be found that more than half of them were originally intended to be painted, and were so painted. Antiquity seems hardly to have imagined sculpture without the presence of color. It was perhaps only in the later years of the Roman Imperial dominion in Europe that portrait statues were made with the intention of being left in white marble. A bronze statue or bust had eyes inlaid with glass or some precious stone, and had the band around the hair, the earrings, and other decorative details gilded. Sculpture in splendid marble or the like would need no picking out with paint or gold, though this was sometimes applied. The plain

wooden, white marble, or stone statue or bas-relief, and also the wooden panel or post cut into representative forms, would be painted as a matter of course, and that in the most elaborate fashion. The statues found on the Acropolis in 1883 and 1886 are painted in this way: the chiton or undergarment where it shows at the throat is green, probably altered by the action of the earth from a more decided blue; the outer garment, himation, palla, or peplos, is painted along its edge, in and out of the falling of the folds of the carved drapery, with a double, triple or quadruple border of several different colors and of elaborate pattern; and the general surface is painted with separate units of design in a rather thick sowing.¹ The hair is gilded or shows traces of gilding upon a dull red surface of paint, the eyes, earrings, and details of head-dress are gilded; it appears that the whole surface of the marble where not covered with paint was changed to an ochre-like yellow by means of wax melted and allowed to soak into the surface, and this wax may have been fixed by a system of encaustic² painting for the whole surface, which, however, is not certain, as the paint is constantly crumbling and dropping away so

¹ *Sowing* : see definition of Diaper.

² *Encaustic* : literally, applied by heat, or fixed by the application of heat. An encaustic painting is one in which the color has been applied with a wax medium or vehicle, this wax being afterward fused and melted into the stone or plaster by hot irons brought near the surface.

that, after fifteen years' exposure to the air, but little of the chromatic effect remains visible.

The value of expressional sculpture in color needs to be considered the more carefully because but little attention is given to it in modern times. It is presumable that the painting of a Greek statue received an amount of thought from the maker of the statue only secondary to that which he bestowed upon the form itself. It would appear from the very rare and inadequate documents which antiquity has left us in regard to this matter that the services of painters of first-rate artistic reputation were called in for this painting, and the presumption is that the sculptor would consult his colleague, the workman in color, deferring to him with regard to the final chromatic aspect of the piece so that both artists worked toward one result. Modern attempts at painting the casts of antique statues, attempts which have been carried out with some care in museums, seem to have failed altogether in this respect. The flesh of a Bacchus or a Hermes was to be painted with a red flesh-color, that of Bacchus redder than the other; and this much being accepted, it has been assumed in recent times that any agreeable warm flesh-color, or still redder tint, would serve to give to moderns an idea of the completed ancient work. But it nowhere appears that the Bacchus of a Greek of the fourth century B. C., was covered with a uniform solid coat of unchanging color. It ap-

appears indeed that those moderns who have undertaken the pursuit of chromatic sculpture by means of natural materials are nearer the mark. When we come to understand that the purpose of such bestowal of brilliant color upon a work of realized sculpture is not a closer approach to imitation of nature, but a purely decorative effect, we shall understand this still better. In what is said above of some modern statuettes and of Barrias' statue of "Nature Unveiling Herself," this purely decorative purpose is explained. That statue, shown in Fig. 193, is life-size or a little larger, and the bust, shoulders, arms, and all of the head that is not concealed by the hair, are of delicately tinted white marble; the hair of bronze, to which is given a tint like that of natural reddish auburn, the very large veil which falls to the knees of a pale yellow onyx, or that which we call so to-day, probably a variety of alabaster, and the whole lower part of the draped person from the breast to the ground, is cut in a single block of magnificent, richly veined red and gray marble, upon which the translucent yellow veil is attached with singular mechanical skill. A part of each foot, only, seems to project from beneath the drapery, and is wrought in the same marble as the bust. It is necessary to make some mental effort to realize that there is not a pinkish white body within the folds of this superb crimson and gold material — that this below the breast is a solid block, even as that above is a



FIG. 193. *La Nature se Devoilant* ; Polychromatic statue
by L. E. Barrias

solid block. So much it seems necessary to record, that we may understand how perfectly the statue is realistic in the better sense, and gives the effect of being a suggestion and a close suggestion of actual life.

And yet it is not like life, not like actuality in any of its surfaces, in their texture or color. Those sculptors who love to combine color and lovely metallic and glassy lustre with pure form, are assuredly on the path shown them by all antiquity. They are already advanced beyond the simple appliances of a time twenty years back, when Cordier and others found means of coloring parts of a bronze statue or statuette, limiting their chromatic effects, however, to suggestions of dark skin and brilliant eyes, and to more fully realized coloring of ornament and jewelry.

This brings us to the third method of applying color to sculpture; the use of painted pottery, hard, and permanent in hue as in form. This was much in use in Grecian and in Etruscan antiquity; and old Rome, the Rome of Coriolanus and even of Scipio, must have been full of it. But for us the Italian fifteenth century is the time of our study, and the glazed and painted pottery of Luca della Robbia and his nephews the visible lesson, although good work was done by other men of that day. The full color-scheme of the Robbia work has not been attempted in recent

times, but the delicate taste shown in some very recent portrait work, as in the busts by Herbert Adams of New York, gives an added hope for a further development of colored sculpture; but this in wholly expressional work is as yet of limited range.

In decorative work, however, in colored architectural sculpture even of large scale, very admirable works have been created. One of the most perfect as well as largest yet produced is that remarkable frieze which crowns the wall of the "greater palace" of the Paris exhibition above cited — the building which is appropriated to the annual exhibition of the great Parisian associations of artists. That frieze, the production of the National Manufactory at Sèvres, is a piece of glazed and enamelled stoneware; an enormous band seven feet high or broad and perhaps one hundred feet in length, embossed with figures in low but not lowest relief, all in brilliant color, as is the background. The whole composition is a work of the strongest color modified at once by gradations in the painting and by the further subtleties of the modelling and the shades with which daylight invests such modelling. Figure 194 gives a small part of this composition, but as the photograph was taken when the separate blocks were put together tentatively and for the moment only, some of the forms are seen to be distorted. In this as in the other figures of chro-



FIG. 194. Paris Exhibition of 1900 : part of frieze of "Le Grand Palais des Beaux-Arts." The design by Charles Risler, the sculpture by J. Coutan and J. Corbel
(From "La Manufacture Nationale de Sèvres à l'Exposition Universelle de 1900")

matic sculpture, the photograph serves only as a memorandum of the general disposition of the piece, the hues acting in a hostile way — tending to defeat all attempts at monochromatic reproduction.

Chapter Twenty-five

REPRESENTATIVE PAINTING AND ITS KINDRED ARTS

CHAPTER XX is devoted to flat painting : and if the present one is separated from it in that it deals with painting in the most elaborate way with gradations of tint and hue, this is done in recognition of the uniform modern practice of all European nations. These classify apart the painter who lays flat color to cover a surface, and “ touches it up ” perhaps with darker or lighter color in lines and dots, thus preparing a panel, perhaps, with a border in scroll-work ; and the “ artist ” so-called who comes afterward and paints a figure, such as a dancing Bacchante in the Pompeian taste, in the middle of the same panel. This distinction has been growing in completeness during four hundred years. It comes of the increasing disregard of the decorative character of painting and the always more general interest in the displaying of facts, the telling of stories, the making of record and even the expression of sentiment by the same art.

Gradation is defined in connection with Chapter XX, but it is necessary to explain how it is done in practice at least in two or three familiar ways. In water-color of one hue or tint the gradation can be made by wash,¹ or by stipple,² or by a combination of both. The monochrome³ in question may be in India-ink, sepia, or bistre, or, as when a blue sky is to be put in behind the buildings in an architect's drawing made for exhibition, it may be in cobalt or Prussian blue or in a mixed tint. In either case the paper (for water-colors are almost always upon paper) is wet more or less thoroughly and is held in a sloping position; and the liquid color is put on in a considerable mass along the top of that part of the drawing which has to receive the gradation — several brushes full of the liquid color. The brush then, dipped in pure water, comes again to the liquid color and drags it down the paper so

¹ *Wash*: in water-color painting a pigment mixed with water so as to be very liquid and floated on with a brush. A flat wash should be uniform in depth or tone throughout: for a graded wash see text.

² *Stipple; stippling*: in water-color painting, the getting of a desired color, whether flat or in gradation, by small touches laid close together. A similar process in metal-engraving is known by the same name.

³ *Monochrome*: a drawing, painting, or the like in monochromy. Figs. 195 and 201 *bis* are monochromes, the one in water-color (India-ink), the other in oil-painting. *Monochromy*: the employment of one color in a design; work in one hue as contrasted with Polychromy. True monochromy excludes the use even of two different blues, or grays. A drawing in black chalk on white paper, or one in white chalk on gray paper is monochromy because the aim of the work is to provide a single harmony in gray.

that the depth and strength of the pigment keeps diminishing. The beginner would make an ugly,



FIG. 195. Part of a drawing in black by Morikage, whose family name was Kuzumi (d. about 1695) ; pupil of Kano-Tanniu

irregular, spotty surface of this ; but the trained draughtsman can grade his pigment in hue or tint

from the deepest color of which his pigment is capable, to pure white — the white of the paper. The same thing which, as above described may occupy a foot of space, can be done in much less space, and indeed in the width of a single touch, but the principle is the same — the color is mixed with pure water until it, the color, disappears. Thus in Fig. 195, a Japanese drawing in India-ink, the gradation which expresses the plump bodies of the birds clothed in smooth plumage has been done with plenty of water and a rather full brush; but it is easy to see, even in the photograph, where the brush has been wiped nearly dry and the gradation stopped somewhat abruptly. Again it is easy to see where another brush with thick ink has put in the touches which indicate the eyes and beaks, the long, straight tail, the stiff flight feathers of the wing, and even the deep tone of the throat and the shoulder where it is desired to express the darker local color.¹

If it is desired to grade one hue into another, as when in the sky a blue must pass through white into yellow or red, the brush takes up some of the yellow or red pigment and, constantly adding more and more of this, increases the depth of that hue exactly in the reverse of the way used

¹ *Local Color*: the actual hue of an object or surface; thus the local color of a square of smooth lawn is a certain peculiar green, although in sunlight it is sulphur-yellow, and in shadow on a bright day it assumes (by contrast) a much deeper green passing into bluish gray.

for diminishing the amount of blue. This two-fold gradation cannot be shown perfectly in a photograph, still less can it be shown in a half-tone print. Fig. 196, however, a piece of very strong work, shows this double gradation in the distant hillside—the slope of Monte Mario as seen from the north. Another thing is shown in that hillside and, more clearly still, in the near cliff or steep bank against which are relieved the branches of bare, wintry trees. Ignoring for the moment those branches, it may be said that both the distant hills and the near cliff are put in with patches of abrupt gradation. The sky-line of Monte Mario is sharply indicated by a well-known device—that of letting the color dry with a decided edge; and it will be seen how on the right of this distant sky-line the broken character of the edge expresses a forest-covered hilltop. The color which is carried downward from this sharp edge is a neutral gray, but into that gray a deep blue has been put in broken separate touches; so that the five tall cypresses seen against the sky are slightly rounded and made solid by this blue (which does not show in the photograph) and the slope below at the left is quite strongly emphasized with the same blue. Those blue touches were put in while the general gray color was still wet, and they are incorporated with it. The patch which shows dark upon that distant hillside is dusky red; which red is carried up to the very



FIG. 196. Part of a water-color drawing by Frederic Crowninshield of New York City

sky-line a little further to the right. The lower part of that hillside is indicated in a greenish gray which seems to climb the hill as, in nature, the green forest growth of a hillside really seems to climb. White patches break the mountain-side, and they may be assumed to stand for out-croppings of bare rock ; and these white patches are simply the white paper left to show. It is a rough paper with much "grain" which causes a certain play of light and shade on the surface. The near cliff is capped by a grassy field seen in steep perspective ; the pale green covering all the surface of the narrow stripe which goes widening from left to right and is broken by very dark and very light blotches ; and a similar green is carried down the slope at the left and comes sharp against the pale water of the Tiber as it flows away from us toward Monte Mario, toward Rome and the sea. The cliff itself is expressed by sweeps and touches of darker brown, of several degrees of redness and of darker and warmer green, all wrought into the warm gray background by the same process of putting in the touches while the background color was wet upon the paper. The low shore on the extreme left is put in with a nearly flat wash ; or with two washes, one of warmer color over a darker one ; but it is to be noted that the skilled artist in water-color never leaves a flat wash to take care of itself. There are no flat tints in nature ; and the very purpose of representative

painting is to borrow that much at least from Nature and to keep all its own surfaces in delicate gradation.

As for stipple, that process is often applied immediately upon a gradation got by means of wash as above explained. The artist who intends to use stipple may be less careful of his gradation in wash and, indeed, may not be practised in that process. He leaves his first, perhaps very ugly, gradation without further attempt to modify it by means of wash, and goes at the surface with his smaller brush dipped in a somewhat liquid color, with which he continually lays stroke beside stroke, and stroke over stroke, working up the intensity of color to the point desired. Most artists prefer this method of producing gradation because it gives a more varied—a less flat and monotonous gradation. Moreover by this means other colors may be introduced in larger or smaller quantities. Thus if the artist finds his blue too cold or too purplish in hue, he can work into his stipple just as much of another pigment as he thinks necessary to correct that fault. It will be noted that the blue touches spoken of above as wrought into the gray of Monte Mario are of the nature of stipple, though slight and not repeated. It is evident, of course, that in this way also clouds may be introduced, the spaces which they are to occupy being left white or worked upon with gradation in stipple of any hue and tint desired.

In what has been said of water-color work, it has been assumed that pigments are used as nearly transparent as practicable. They are used as purchased, some more, some less opaque by their nature. But many artists prefer to use opaque white with their colors, and so to produce gradation by mixing more and more white for lighter tints. Now, in transparent coloring the white paper is commonly taken for the highest light. Patches of it are left for the last and highest step of gradation, and patches nearly as white and light are got by washing out with pure water. But in water-color painting done with what is called *loaded* or opaque color, the whites and high lights generally are painted in with color that is thick enough to be laid in points and slender lines upon whatever colored surface is already finished and partly dry. Thus in the drawing, Fig. 196, the bare branches of the trees on the right are put in with opaque yellow or yellow mixed with white, and with a nearly transparent brown which has been left to dry with sharp edges; and the really remarkable achievement of relieving those branches against the cliff comes of the swift dexterity by which those strange broken lines express the free growth of the tree. But opaque color may also be used for the whole of a drawing in water-color. It was in this way that were painted the miniatures of the splendid manuscript books produced before the general adoption of printing: the color was

piled heavily and solidly upon the ground, covering it so completely that even a piece of gold leaf was hidden by it, and showed only where the metallic effect was desired, as is partly explained in Chapter XXII, and its illustrations, Figs. 175, 176. Of course the two methods may be used in the same drawing: whites left in the white paper, and others put on, by way of afterthought; and indeed this is done in the drawing, Fig. 196.

Fig. 197 shows a water-color drawing made entirely in loaded color. The head and neck of the bird with its local color, deep blue passing into an intense green above the eyes and again at the ruff, and the similar passage of melting blue and green in the shaded part between the projecting flight-feathers of the wings, is all wrought in solid touches of color mixed with white and nearly as opaque as oil paint would be. The passing from this color to the ruddy brown of the breast, and from this to a cold yellow at the shoulder, is brought about in the same way by laying touch beside touch (and more rarely touch over touch) so as to produce what is on the whole a mosaic of colored patches compacted together in a wonderful fashion as the wet color dries. This very compacting together of the touches of paint is one of the great boasts of the technician; this in another medium is the *impasto* of the Italians, and this in oil painting determines by its peculiar-



FIG. 197. Water-color drawing by J. W. Hill, late of Nyack, N. Y.

ity, in this and that piece of work, the whole general character of a painting.

Distemper (in Italian *tempera*) was a method of painting much in use before the general introduction of oil painting. The juice of certain fruits might be used, or egg, or gum, or milk, or honey; or several of these were used, with water, to form the medium by which the dry color was put on and supposed to be secured in its new place. The panel¹ pictures of the Italian Renaissance were painted in that way, while the wall pictures were in fresco. This process tends to minuteness and delicacy of touch and of effect, even as fresco tends to large and open work with but little detail.

As for fresco, it is the process of water-color painting on damp (that is, freshly laid) plaster. As the whole dries together, it is very permanent; but there are but few pigments which can be used in the process, and the needed changes can only be made by cutting out the piece of plaster and spreading it again. It can be retouched in color, however, and so becomes modified, being no longer pure fresco.

¹ *Panel*: a flat surface slightly sunk below the ground; hence in decorative art, any reserved and exactly defined flat surface, as one prepared to receive a painting. In the language of the painter's studio, a board prepared to paint on; and also, without the article, wood in general when used for painting on, as in the phrases "pictures on panel," "panel-pictures."

In oil painting the process is not wholly unlike that described above as stippling in water-color. Nothing like a wash can be used in oil painting as a commencement for the work, because the pigment is sticky and always rather opaque, and the surface it is applied to is that of a coarse linen ("canvas"), or panel or mill-board, which has been coated with a solid and opaque medium, fit to take and hold touches of viscous paint, but repelling a liquid. Something like a wash occurs in glazing,¹ but that comes after much work has been done upon the canvas. The gradation in this medium is produced by putting in touches, one upon another and one beside another, the character of the touch being changed continually by the mixing of the colors upon the palette. The little heaps of moist and sticky paint set upon the palette are continually attacked by the painter's brush, which picks up more and more of the chosen pigment, as white is used to make the gradation from darker to lighter blue, or as a certain red is used to make the gradation from the lighter, almost white, passage in the clear sky to the warmer glow above the horizon. This again can be done within a very small space, exactly as mentioned above in the case of water-color. A pearl can be rounded and have the effect of relief

¹ *Glazing*: in oil painting, the use of color much thinned with oil so as to be quite liquid, which is passed in a thin coat over painting already done, after it is quite dry.

and of lustre given to it, within a circle as large as its actual circumference. In this matter of minuteness of touch, however, artists differ very greatly; and while there are some whose touch of color on the canvas is untraceably small (see Fig. 198), there are others who make no such attempt, but whose long touches of color are allowed to cross one another, mingle with one another, and combine with one another to produce a hue or tint different from any one. So, some painters like to smear, and to leave shining surfaces where the oily paint has been applied in broad sweeps: others avoid that, and keep their touches comparatively dry as well as small. There are, indeed, oil painters who affect the placing of little touches of brilliant color closely side by side upon the canvas, so that a peach (for instance) is rendered in its color effect and also in its roundness by a simple laying in of a minute mosaic — hundreds of minute touches of constantly changing hue. Close examination will reveal this. There are water-color artists who work in a precisely similar way: William Hunt, an English artist who died in 1864, had a great name for fruit pieces wrought with little touches which you can almost count. Still, even the closest examination will not reveal just what colors have been used, because the appearance of each separate tint is immediately modified by the action of all the touches near. These varied ways of using oil paint cannot be

made clear in photography, but Fig. 198 gives half of an oil painting of the most minute and delicate workmanship conceivable; one in which the artist has really constructed a mosaic of touches. There are parts of the surface where examination with a magnifying glass seems to show certain touches, as in the yellowish brown cedar trees on the right, which are laid upon the white ground of the snow-fields, but for the most part the touches of color are laid upon the canvas and are fitted close up to each other, their oily and sticky substance causing them to unite into a really homogeneous layer of paint. The oil painting of the great schools generally differs from this in the much freer use of under-painting and over-painting, as where an almost complete scheme of the picture is laid down in black, gray, and white to be painted over in not perfectly opaque colors, or as where a foreground object which is intended to be green in effect (the local color being green), has been painted in strongly with blue and then glazed¹ with yellow. No attempt can be made here to show by a series of photographs the many different processes known to have been employed by painters of great renown. But the illustration, Fig. 199, shows something of the result in a well-preserved picture of the great Venetian school. It is not a recognized masterpiece; it is selected

¹ *Glazed*: see note, *Glazing*.



FIG. 198. Part of an oil painting by Charles Herbert Moore of
Cambridge, Mass

because yielding a clear and uniformly good photograph on a scale near enough to the original; but the photograph cannot show the color nor yet the character of the brush-work while yet



FIG. 199. Oil painting by Jacopo Robusti (Tintoretto), in the Doge's Palace at Venice: called "Bacchus and Ariadne" and also "Ariadne crowned by Venus." About five feet long within the frame

it does show the elaborate and subtle gradations. The work of Tintoretto's great contemporaries was different in manipulation from his own; his own painting is not like that of Titian nor like that of Paul Veronese; Titian's method was as different as possible from the method of Paul Veronese,

and yet those are two kindred artists, the greatest men of the great Venetian school.

The purpose of all this is the purely artistic one of having everywhere in the picture a gradation of some kind — of leaving absolutely no spot in plain, flat color. The same tendency prevails and the same rule holds in artistic drawing, for even the beginner is taught how to “shade” in lead-pencil in such a way that his stroke shall grow closer and darker in one spot, more open and paler in another spot, and in this way a continual change of intensity be produced. In like manner the painter by profession, the skilled executant, will often turn from his palette and canvas to crayons and a sheet of paper, or to the process known as pastel;¹ and so, working either in black monochrome, or in the two monochromes, black and red mingled in a curious way even in the drawing of a single head, or in the almost infinite varieties of color possible to pastel, will produce a gradation not as smooth as that possible in oil painting or in water-color, but one as interesting, as powerful, and as expressive.

In fully completed painting or in elaborate drawing with crayons or the like, there will be

¹ *Pastel*: a method of drawing with colored crayons, of which there are hundreds of different shades. The resulting surface is beautiful, and the most elaborate effects can be got by means of pastel; but a touch, or even a violent jar, will disturb the surface, and the necessary covering sheet of glass takes away much of the charm.

no ungraded passage. A sail as of a fishing-boat will not have more than one little touch of the white or yellowish white which is taken as the "local color." If you stand in front of an important painting and try to see with what pigment the red cloak or blue sash has been painted, you will not find more than a single touch anywhere of any unaltered red or blue. The elaboration of the process of graded color and of slightly graduated shades has been carried so far as to bring about that strongly marked division, already alluded to, between the flat painter and the painter armed with all the refinements of his art. The result has been that, as the painter capable of such work has grown to think himself and to be thought by others a person of special gifts, he having been taught in a special way, in art-school or studio, and therefore to be separated from the community much as "the doctor" is, while the painter in flat is assumed to be a man who has taken up that trade instead of another and has learned it as a trade; in like manner the awkward and illogical division between so-called artist and so-called mechanic has become fixed. There is positively no use in trying to treat these two classes of workmen as if they still belonged, as they once belonged, to the same class. In old days they were all trade-taught together, and grew up to be all tradesmen together — the best men coming to the front. Something like the older organization

of artists in Europe may still exist in the East. Assuredly it did exist there even in the last decade of the nineteenth century; and its workings could be seen, in part, in the appearance of delicate gradation in painted lacquers, even those of no great cost, and in those of 1875 as well as in those of a century earlier. In such ways the small ornaments which Mr. Okakura dismisses as playthings are still seen, to the amazement of Occidentals, to be closely allied to the most sublimely inspired painting of later Japan as of ancient China. It is moreover the best of discipline, this influence of the unfamiliar Eastern art over the Western mind, compelled, in its ignorance of the legends and stories, the traditions and the accepted conventions, to receive an artistic impression and this alone.

Now, as is said above, that kind of painting which seeks gradation, seeks also, primarily, to represent objects in color and light and shade upon a flat and smooth surface. In flat painting as described in Chapter XX the primary object is not the representation of objects — it is the beautifying of the surface. But painting in gradation may almost be thought to have been invented on purpose to represent objects. For, consider how nature treats an object, how she displays to us its roundness or squareness, its roughness or smoothness — its visible character generally. She does it by investing the object with shade. Nature shades a

white egg in gray ; she shades a brown egg in a very different tint from that which invests the white egg. A robin's egg, again, is shaded in a way all its own, and the dark side, and again the lighter under part where there is reflection, are shaded by not a mere darkening of the lovely greenish blue, but by a changing of the color. The color itself, or what we call the hue, undergoes a change, while still keeping its quality of being interestingly and beautifully blue-green. As suggested above, the colorist in painting is, roughly, he who sees the natural modulation of the brown egg and of the blue egg and cares greatly to preserve their color-quality — who will not shade all three eggs in the same gray and then lay a wash of brown or of blue over the shaded egg to give the local color. That is the way it has to be done in much mechanical drawing, and that is the way it is done by some very famous painters. But they are not colorists. They are the *draughtsmen* in a special sense, the men who look upon color as a secondary matter. If you look close into a painting of the central time of the Venetian triumphs, as if you select a Paul Veronese of first-rate quality and uninjured, you will find it impossible to say whether the gradation which makes a red cloak such a splendid glowing jewel is entirely done by changing the hue, by altering the quality and character of the red while still keeping it red. There will seem to be no admixture of black or brown or

any neutral tint: but then you will remember that this redness does not exist in itself alone — that it is made in part by the effect upon this hue of all the neighboring hues. It is because a Venetian like Paul Veronese seems to model all his work in pure bright color that we call him primarily a colorist. If, however, the artist be one who, like Rembrandt, prefers warm brown to red, and had rather portray a “buff coat” than a crimson silk doublet, we may still give him the title of colorist if he is seen to care greatly for the harmonies of hue which are to be got only by carefully wrought gradation. The colorist is indeed apt to prefer brilliant hues, reds and blues and greens with their numerous modifications; but he may have a preference for what we moderns call soft or delicate colors, and may enjoy getting some effect of brilliancy out of grays and browns.

It is in this latter way that there is produced what we call in landscape painting a luminous cloud or a luminous cloudy sky. There is one of Homer Martin’s pictures in which the gray clouds seem to invest the whole heaven, and the hollow vault of vapor seems to have no end, reaching the far horizon; and yet this whole firmament of cloud seems to give out light and the picture is not that of a sombre day. Again it is in this way that the Japanese artists work, very generally. They are the masters of buff and rosy gray and warm dark green. They are the masters of India-

ink and capable of exquisite gradations of its singular warm gray hue, culminating in nearly perfect blackness. In like manner they are the masters in decoration of metallic lustres of modified color, using a dozen different golds, with the deep bluish black of Shakudo,¹ the strange mottled drab of Shibuichi,² and the numerous grays and greens which they get from the surface of bronze. And in this way the Japanese hold their own against the magnificent pure coloring of the Chinese decorators, compelling a recognition of themselves as colorists though with so little use of what we used to call primary and even secondary colors.

The use of painting in gradation is, then, to represent objects: but the purpose of such representation of natural objects is, in the artist's mind, the making of a significant and, in a way, beautiful oblong or oval, or other limited surface, of varied hues and tones. He desires, indeed, to show you something, and in so far he differs from his ancient predecessor, who hardly thought of doing more than *hint at* the visible fact, but, most of all he wishes to produce something of his own. He means to make a picture, but the public much more commonly think of it as a form of narration

¹ *Shakudo*: an alloy of copper; according to Rein ("The Industries of Japan"), copper with from 2 to 5 per cent of gold.

Shibuichi: an alloy of copper and silver; according to Rein there is sometimes as much as 32 per cent of silver.

or description or appeal to sentiment, and ignore the artist's chief purpose altogether. That is the difficulty: the painter cannot forget his own duty and pleasure in order to do what the public asks for; the public cannot often grasp the intent, the meaning, the *reason why* of the artist's work.

In discussing the painting of highest artistic quality, that which uses gradation of color and of tint in every part, and never, willingly, leaves a surface of any measurable size of a uniformly flat hue (see Chapter XX), we have not to disregard painting used for purely decorative purpose. Figure 200 is a round surface, upon which the artist has painted on a gold ground a very charming, an idealized love scene. The scroll between the heads contains, in very strange Italian, the youth's protestation of love, and there is emblazoned upon his cloak what we take for his *impresa*, his private badge, with the motto "Pella forza delli contrarii venti." In this way the design is made peculiarly decorative. It becomes evident that in this picture the artist has proceeded exactly as he would have gone to work at a religious painting intended to form the centre of a tabernacle in a private oratory. He would paint a madonna in a mandorla¹ with precisely the same touch, taking equal and no greater pains to secure lovely gradation of tone.²

¹ *Mandorla*: in Christian symbolism an almond-shaped glory, usually surrounding the whole figure. Called also *Vesica Piscis*.

² *Tone*: general effect, as of pure light and shade in a monochrome



FIG. 201. Hôtel Soubise, Paris ; detail of the oval salon ; paintings by Natoire

Fig. 201 is one of the painted panels from the Hôtel Rohan-Soubise in Paris—the building now



FIG. 200. Top of a box : composition upon wood, gilded and painted in full color. Italian work, fifteenth century

(From "La Collection Spitzer," 1892)

used for the storage of the national archives. Among the splendid rooms of this princely resi-

or in a bas-relief when considered as a single composition in light and shade ; or of color, whether in a work of art, a natural landscape, a building. A painting receives a new tone from time ; it may be thought that the admired tone of certain pictures is rather the work of time than of the artist.

dence, built at the beginning of the eighteenth century, this oval drawing-room is celebrated; partly for its admirable disposition, partly because it is the very type and model of the rococo style in its highest refinement, but chiefly for the remarkable paintings by Charles Joseph Natoire. These represent the adventures of Psyche, a story which was much in favor at the time of the Renaissance, and which was kept alive in a way by the Raphael paintings in the Farnesina Palace — famous pictures, though rather the work of Raphael's pupils than of his own hand. The painting shown in Fig. 201 seems to represent Psyche's escape from the persecutions of Venus by taking refuge with a river god and his attendant nymphs, and the especial interest of the picture is in its severe restraint within the limits of decoration, in the great cove between walls and ceiling, while yet it is complete painting, representative painting in the sense used in this chapter.

The great number of different processes in use among artistic painters, and which are partly capable of being described in words, is made indefinitely greater by varieties in the practice of each of the more important methods of work. Thus, in water-color it is perfectly possible and even customary to let the white paper stand for the highest light and to work to that as the highest note of the scale of color and light, while at the other end of the scale is the deepest hue which you think

your color box will afford, or which you think it safe to use as a part of your scale, for every one is not equally the master of a long gamut of tones. But while one well informed and practised artist in water-color will advise his pupils in this direction, recommending them to use the white paper "for all that it is worth," to another this seems a false way of proceeding, and he will advise against it, bidding the pupil remember that nothing which he does not put on with his own hand is trustworthy; that he must rely upon himself for the application of the whites as well as of the darks. It is literally true that these two precisely opposite pieces of advice are given, not merely in special cases but as general laws of practice, by excellent painters of many years' standing and successful practice in water-color. Many different hand-books of advice have dwelt on the important distinction there is between body color and transparent color; this question, the use of the paper-white or the added white of pigment, is akin to that controversy. If the white of the paper is used as high light, then it is easy and natural to lead up to this by tints and thin washes of translucent color, until the passing from this to opaque color becomes not only difficult but a step of such boldness that few have dared to make it; while, on the other hand, if the artist has made up his mind in advance to show no white paper at all, but to treat every part with color, concealing the ground altogether, he will

then almost of necessity think of color mixed with white pigments to begin with. And yet, as no such rules hold in painting, so there is many a water-color drawing in which both transparent and opaque color are freely used. The skilled artist does as he likes! Moreover, it is to be noted that many of the colors furnished by the dealers are opaque already; and there are some pigments which deceive you into the belief that they are transparent, but which, when dry, are almost completely opaque.

Gradation being, then, the very essence of representative and expressive painting, there is still one evil tendency which comes with this love of and devotion to gradation — the tendency to care for light and shade, excluding rich effects of color. Although the most brilliant and perfect color comes from gradation, yet the work of the man who heartily enjoys gradation has often led him to the treatment of this one element of greatness as if it were the only one. Fig. 201 *bis* is a piece of drapery painted in oil monochrome by the great artist, Leonardo da Vinci, or at least ascribed to him on sufficient authority. The student cannot tell whether the drapery is meant to be white, which the artist has failed to represent rightly through his interest in working the gradation from light to dark, or whether the material is of dark color and of lustrous surface. But this is a characteristic fault of Leonardo; he is not a colorist



FIG. 201 *bis*. Study of Drapery in oil monochrome, ascribed to
Leonardo da Vinci

— he is not, in the work we have of him, a great painter, but a very great man, a giant of intellect, who turned his attention to painting among other pursuits and other studies. We have so little of his painting that we cannot judge that side of his genius aright ; his one great mural picture is absolutely destroyed by injury and repainting, and his few authentic “easel pictures” are small and simple and cannot be thought to represent his power as an artist. Such as they are, however, they justify an opinion held among students of the colorist schools, to the effect that his work is really elaborate drawing, wonderful in power, but neither expressing a painter’s way of looking at nature nor showing a painter’s way of working.

A very large amount of water-color work is of the nature of sketching. This we discriminate from drawing in the usual sense, in that it is rapid and of the nature of the making of memoranda. A sketch is that which does not attempt to give the whole of the scene represented or of the thoughts called up by it, but to set down certain memoranda in such form as to make them useful at a later time. Or, by extension, a sketch is the swift preparation for a work of art about to be begun, though this is assuredly a strained use of the term. If, then, the artist desires to make a water-color sketch, whether from memory or from what he sees through the open window of his room, or out of doors, his business is to keep the boughs

of the foreground trees in their right places, the group of middle-distance trees in its place, the stretch of smooth water of the lake as a band crossing the drawing from the right nearly to the left side of the composition, the distant island and the more distant hilly shore, all in the places on the paper in which his eye or his mind sees them as the actual scene rises before his optical or mental vision. To put these things into their right places, and that in unfailing care for the effect which each has upon all its neighbors, so that the clump of trees, for instance, shall not be at all too heavy nor too sombre in color, nor yet too evanescent and uncertain, that it shall be opened up to show the distant sky through it exactly as much as the natural scene suggests that it should be opened up — to do all this is to draw landscape well. When a teacher of advanced pupils says of one of them that he “draws” well, he means that, generally. The power of copying the bare limbs of a tree mapped, as it were, against the sky, is good, it is an excellent beginning. The power to express the anatomy of a limb and its setting on to the trunk is rare, and a really fine thing to possess, but it is only partial. Those and other such gifts do not alone make a good draughtsman of landscape. The problem before the sketcher may be to produce his slight drawing without disfiguring his paper with too much lead-pencil-scrabbling in the first place, because it will be hard for him with

India rubber or with bread crumbs to get rid of this annoying and discordant invader. If he uses charcoal he has indeed the facility of whisking it away in a moment with a cloth, but some of it may cling to the wet work; and if he does not leave it until the work around it is wet, that is, until the color composition has been put in at that point, he has lost the benefit of the black and white blocking which he has proposed to himself. Drawing in water-color is, therefore, a singularly refined and beautiful thing to do or to watch in the doing; and between two artists in this medium, of supposed equal general rank, it is noticeable how much more easily and perfectly one "draws" than the other, that is to say, how invariably the parts of the composition of the more skilled draughtsman go into their places, and how naturally they seem to find themselves where they are wanted, one after another, in form and in color nearly what they are to be at the completion of the work. It is noticeable, also, how different are their ways of going to work. The instance of a landscape has been taken, because, in the first place, there is so much more water-color work which is devoted to landscape than to other general subjects of art, and in the second place, because it is so easy to express the thought in words, and to name Tree, Hill, Leaf, and such like elements of the design; but the same thing is true of figure work, and the modulation by touches of the brush required to

give the rounding, and also the color of cheek and ear and hand is in like manner slow and difficult to the one otherwise able painter, but a matter of course — the simplest thing on earth — to his not more meritorious rival.

There is no fine-art process in which so much is done with so few touches as in water-color sketching. If the artist uses, as is far more customary, transparent color applied to white paper with a somewhat rough surface, it is simply amazing to look upon the result of an hour's work. During that hour a new little world of out-of-door nature has grown up on a piece of paper, perhaps a foot long and nine inches high. The delight, the charm of so much of the landscape as can be seen by a person looking generally in one direction, as if through a frame or a partly open window, is producible upon a flat surface in as short a time as that. Nor is there any reason in the artistic value of the thing why this should bring a very much smaller sum than a picture upon which mornings of labor have been spent. Artistically one may rank as high as the other. The one can never replace the other ; the world is not going to abandon altogether the minutely worked and carefully handled painting of large size for the swift sketch ; but the tendency to treat one as serious art and the other as trivial has no more sound basis than this, that of the slight piece of work there are more specimens resembling one another somewhat strongly

in superficial characteristics, and that hence the choice between the best and the not so good is far greater. Consummate excellence in landscape sketches is as rare as consummate excellence in large oil paintings, but it will not be so readily recognized when it occurs, because its essential characteristics are hard to detect and the presence in its neighborhood of very many fairly good drawings made in nearly the same way, according to the same traditions and with as honest a love of nature to guide them, if not with anything like the same artistic ability — all this tends to prevent the recognition of the real artistic excellence in the one drawing where it is to be found supremely.

The practice of the Japanese has been of great value to artists of European training, as revealing to them what can be done in the way of good art by a few strokes — in a few minutes — perhaps without the presence of the object represented. It has been made manifest by those swift drawings that the true object of drawing is to render the essential truths about anything, a sprig of three or four leaves or a hillside with a hundred trees. Such a drawing made at high speed is not a portrait of anything; that is to say, it does not attempt to differentiate very exactly one sprig of maple leaves from another; but it expresses all, or nearly all, that the artist knows about maple leaves, the twigs that bear them, and their setting

on to the branch—the way they grow and the way they group themselves. How many years of taking portraits of leaves and how much of inheritance has gone to make up this knowledge it is not easy to inquire. Every separate student will have his separate experiences as to the growth of this knowledge in his own mind and hand.

This chapter is concerned with paintings used as representation of external nature, including therein such expression of sentiment as may be conveyed by the aspect of things, by incidents represented or alluded to, and by human gesture and expression of face. Human expression conveyed by face and gesture is indeed the special aim, and success in it the greatest triumph, of certain painters and of certain schools. Now, if we consult certain nineteenth-century writings about art, we shall find running through them the assumption that painting (as well as sculpture) is concerned with moral influences as much as, for instance, poetry. It is assumed by such writers that the language of form and color is used (or that it should be used) very nearly as the language of words is used by prose writers or poets. Now there have been one or two painters of our times who are distinguished and who are recognized as men of power, and who have yet concerned themselves in this way with the expression of moral truths—with religion, with patriotism, with appeals to poetical sentiment of a kind which

can be expressed perfectly in words. There are scores of painters who try to do this, who are not distinguished at all — who are not accepted by their fellow-artists as very serious painters. But there are a very few who are accepted as men of high rank in spite of their disposition to teach in other than an artistic way. Thus it is said plainly of George Frederick Watts that his purpose in producing his large pictures was an educational one. His most careful critic, the French writer Robert de la Sizeranne, says plainly that this artist is satisfied if he can do what is great and noble in spirit, the serious defects in his technical work being of little consequence in his own eyes. But the fact is that awe, pity, admiration, sincere grief, honest and wholesome joy, unselfishness, hope, and the rest of them, are inexpressible in form and color, except in the way of slight suggestion: and that a slight woodcut is fully as competent to make such a suggestion as an important and masterly painting. The painter may or may not have such thoughts — his picture cannot tell you that, his picture can only be spoiled by too strenuous an effort to express such thoughts. There is a thoughtful habit of mind fit for the painter, but it has to do with painting, not with joy or grief, hope or terror. George Frederick Watts has left a painting in the Luxembourg Gallery, *Love and Life*; and the winged young man who is helping the slender youth of

indeterminate sex up the steep rocks may indeed be "Love" assisting "Life" up the stony path, but assuredly it is not obviously so. Apart from its title in the catalogue, it might be one more illustration to the fable of Cupid and Psyche, or it might be a subject from the Arabian Nights: and meantime, it is not a lovely picture. As a painting it belongs to an inferior class. A still more celebrated picture by the same man is assumed to show Death overcoming Love. Even if painting could describe, by showing it, what poetry can so easily describe in words — the aid given by Love to the struggling human soul, or the defeat of that same Love when Death is his adversary — these statements would still amount to very little. Where are we aided — in what is our thought stimulated when we receive that impression which alone the painting can give — that something big and irresistible but not to be described aright can overcome even Love; or that on other occasions Love may help Life? The picture is thrown away that is cast in such lines as these. The poem in words may say all this, for it is the gift of language to relate and to describe, and also to appeal, to analyze, to explain, to enter into the depths of psychology and the heights of religious aspiration; but it is not given to the language of form and color to do anything of this kind. To sacrifice by even a very little one's possibilities of producing beautiful works of fine

art in the attempt to enter these to him inaccessible realms of thought, is a sin against the art that the painter professes. It needs only a moment's thought of the unmeasured superiority *as a painting* of any one of the important works of Whistler, to make clear the conditions here. Whistler made no pretensions to moral teaching or moral aspirations, but he painted admirable pictures.

There is still another view rather generally taken by writers of English: the opinion that painting is concerned with the close copying of external nature. Of these writers those who are the better informed state plainly that the word "imitation" should not be used, because imitation is impossible without sacrificing everything that is valuable in art quality, as stated in another paragraph of this chapter. The greater number of these writers, however, confuse the attempt to *represent* objects and scenes with a desire to *imitate* those visible things; ignoring therein the well known fact that only a very few painters have ever tried to produce deceptive transcripts of external objects, and that only in the case of certain perfectly commonplace utensils, indoor objects, a group of iron pots, two violins on a velvet cloth, or the like. By dint of sacrificing everything to the one matter of roundness, projection, the reproduction of reflections, and the careful handling of darks, such simple objects may be made to look for a moment, and in a half light, as if they really

existed in the solid ; but imitation gets no farther than this in painting in the ordinary sense. To get more than this, you must resort to the devices of the diorama or the cyclorama.

This long chapter may be summed up by the following statement of the facts about the painter's manner of designing. They are nearly these —

I. The painter has always in mind the arrangement of dominant lines and of masses of form and color so as to be effective — not necessarily “beautiful” in the common sense, but very interesting.

II. When the work of art is to be small, that is, an “easel picture” or a panel in a cabinet, or the top of a box, a water-color drawing on paper or on the vellum of a book-cover, a crayon drawing or the like, one point of view only is considered, and it is assumed that the spectator will look at the picture from this point of view. In a picture hung upon the wall this point is usually opposite to the middle line of the picture taken vertically, and at a height on that line opposite to the horizon as shown or inferred.

III. When the picture is very large, and especially when it is out of the usual proportions, as a wall painting which may be very long horizontally compared with its vertical height, this matter of the point of sight becomes complicated, and the artist has to choose his method of procedure. Thus he may divide his work by such decided up-

right objects as trees or the corners of buildings, or a deliberately introduced pillar or obelisk, or a cloud which does not form a part of the immediate subject of his work; and this will make two or more compositions out of one in such a way that two or three separate points of view may be established.

IV. The painter habitually gives just so much of natural fact as he thinks his immediate purpose requires, and no more. He often combines such facts in novel ways without waiting for the direct suggestion of nature. This is equally true whether he is painting his picture out of doors, like Turner working in Switzerland or Corot at Fontainebleau, or in the studio from studies and from memories. It is equally true whether he is working upon landscape subject or figure subject, — with this difference, that many painters are hardly able to dispense with the living model as they work, while others work much without the presence of a living model and then call in the living model to correct their work. This subject has been discussed at length in connection with sculpture, for which see Chapter XXIV.

Except where portraiture is the express purpose of the work, the painter's instinct will generally keep him from representing very accurately any object or person, because the whole work of art must be kept consistent and in harmony. Thus in a quasi-historical picture, in which, say, Napoleon

should appear, the painter will often find the most serious difficulty in so placing his exceptionally famous personage that the whole work may be kept from being a mere setting to that single figure. Even a tree, chosen because a special favorite of the artist's "patron" or of the artist himself, will be a dangerous incident in a painting of landscape. It will be seen how closely this principle allies itself with the other principle of the rejection of all imitation.

To imitate nothing visible nor even desire to do so.

To give the essential and noble truth about all manner of visible things.

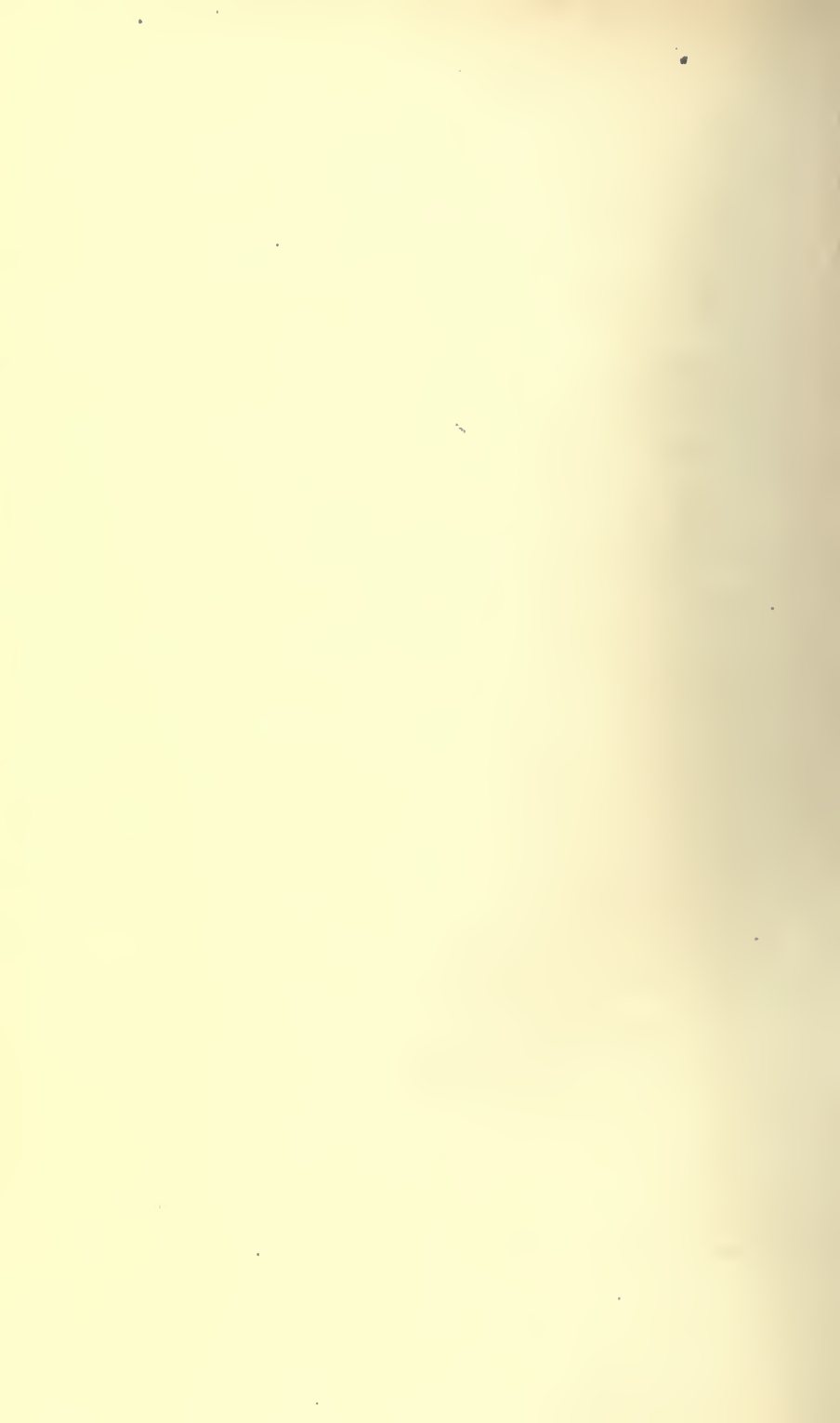
To select in preference very interesting things, those which reveal many essential and noble truths.

To attain to great manual skill and profound knowledge, in order to be always ready, always prompt, and to lose no time.

Such a mental and physical course of life is what the representative painter proposes to himself.

PART IV

THE FINE ARTS NOT OF HAND-WORK



Chapter Twenty-Six

DECORATIVE TREATMENT OF BUILDINGS

THE position of architecture among the other fine arts is extremely difficult to explain or to understand clearly. Chapter XIV was devoted to building as a manual art and as the origin and source of all that is interesting in architecture, but in that chapter nothing could be said of the non-manual side of architecture. This side of the art is, however, a most important one. An Egyptian temple was planned according to a never disregarded tradition, and the general character of the battering walls and the hollow cove of the cornice, the peculiar forms of pylon and propylon, were not to be varied. The manner in which sculpture was applied to the walls and in which that sculpture was afterwards painted in bright colors was a settled thing which no innovator would dare to meddle with. The Egyptians may be said to have had four "orders" of columnar architecture, even as the Greeks had two; but the Egyptian evolution went on for four thousand years of independent nationality, or ten times the

period of Grecian freedom of thought. And yet there was room enough for the originality of design which we desire. There always is room enough. The best designing has been done always within the strictest and closest limitations — under the most precise and peremptory rules of tradition. The “architect” of such a temple may have been a priest without the least knowledge of building — and yet it is quite evident that the architect in question had a task as difficult, and affecting characteristics of the building as important, as the work done by the trained mechanics who built and carved and painted. His task was to direct. That task, and its nature, are the subjects of this chapter.

The Doric temple of the Greeks had an almost unvarying plan. In the case of a somewhat costly building the question for the controlling mind was whether the usual form should be followed, with six columns on the front, thirteen (including the corner ones) on either side, and a closed chamber or set of chambers within, of the usual proportions; in short, a building like the Theseion at Athens, the temple of Zeus at Olympia, and many others in Greece and the Grecian colonies — this or something more unusual, like the long and narrow temple of Hera at Olympia, or the temple of Pallas Athena on the Acropolis, or “Temple G” at Selinus, with its eight columns on the front and seventeen (including the corner ones)

on either side. Or perhaps this director of the works, this Phidias or other general superintendent, found that he had miscalculated the amount of money at his disposal, and that he must abandon all idea of having a peripteral¹ temple like the buildings named above. In that case he had to go back to an amphiprostyle² structure and be done with it! In either case there was no doubt as to his plan, and as little doubt as to the general shape of the shaft, bell, and abacus of his column or of the general succession and the proportions among themselves of epistyle,³ frieze, and cornice. The pitch of the roof, too, was prescribed within a fraction of a degree of inclination.

It is evident that the little prostyle⁴ temples and the great peripteral buildings were equally true to their constructional requirements; and that

¹ *Peripteral*: having a portico of columns on every side; said of a building the porticos of which face outward, that is to say, enclose the central structure, in contradistinction to *peristylar*, which refers to a court-yard, garden, or other enclosure with porticos that face inward, separating the open space from the buildings which surround it.

² *Amphiprostyle*: prostyle at both ends (see the definition of Prostyle). Usually the porticos serve as entrance porches, the eastern one to the main temple-chamber, naos, or sekos, the western one to a minor apartment, opisthodomos.

³ *Epistyle*: the course of stones made up of the great beams which stretch from column to column or from column to anta in a classical building. It is the lower member of the entablature and is often called architrave.

⁴ *Prostyle*: having a portico of columns at one end only, that is to say, at the entrance front, usually the east.

even the vast and complex dipteral¹ buildings of a later style, like that of Ephesus with a hundred columns in the exterior ordonnance, or that of Miletos with one hundred and twenty, if we count the entrance lobby, the pronaos, were as logical in design as the little ones, and not more so.

In each alike the design was based upon the actual structure. This structure and its peculiarities were not forced upon the critic's attention; the joints were made as invisible as might be and the whole surface was, probably in almost every case, skimmed over with a thin coat of stucco before the brilliant painting was applied; but there was no doubt about the basing of the whole design upon the simple construction of stone piled upon stone without mortar, and stone beams laid from upright to upright, the whole kept in place by gravitation alone. Wooden beams might be used for the roof and these might be concealed by tiles of terra cotta. The roofing itself might be of ceramic tiles or of slabs of marble. As a result of these differing details, the artistic effect of one building was a little more picturesque — of another, a little more grave and reserved; but they were all of trabeated construction and there-

¹ *Dipteral*: peripteral with two rows of columns. There are few such buildings, but the two named in the text, viz., that of Artemis at Ephesus and of Apollo at Miletos, and several Roman constructions, such as the temple of Olympian Zeus at Athens, were built in this costly and elaborate way.

fore of trabeated design, uprights and horizontals, and nothing else except deliberately chosen ornaments.

They were thus realistic in design; and yet this realism, this clinging to the system of building as a principal motive for design, was only a part of the artist's thought; new subtleties of form, as in the inclination of the columns and the rounded tapering (entasis) of the shafts, and the curious, indescribable curve of the bell of the capital; new refinements of a still more recondite character, as in the rounding upward of the epistyle and the stylobate¹ toward the middle of each side, so that the corners were lower by an inch or two in a hundred-foot building than the same member was in the middle; new thoughts about the application of vivid color to architectural members, and as to the possibility of putting flat patterns—stencilled bands of leafage and scroll—upon the simple wall of the naos, so that they would be broken by the vertical lines of the columns and appear and disappear agreeably; new suggestions as to the possibility of larger or smaller acroteria² at the apex and at the two lowest points of the

¹ *Stylobate*: the horizontal course of stone upon which the columns of a portico, or the like, are set.

² *Acroterion*, plural *acroteria*: originally a pedestal set on the raking cornice of a pediment, as at the point or at the two outer extremities: often a scroll ornament, a vase, or even a statue placed in a similar position; the name of the pedestal being applied also to that which it carries or that which replaces it altogether.

sloping corners of the pediments ; new questionings as to whether the tympanum, the central panel of the pediment might not be recessed much more deeply, and whether, instead of the relief sculpture which his predecessors had applied to that surface, full statuary might not be used there, because that would be such a good place to show off statuary if made larger than life and boldly handled both in form and in painting. It is evident that the answering of all these questions would be a matter quite apart from the constructional design. In all great architecture that truth of constructional design is taken for granted and the work goes on thence into new and separate developments of noble art.

Consider for a moment the Gothic work, that of the perfectly developed but as yet unexaggerated type, the art of the east end and the whole choir of Le Mans cathedral. Fig. 202 shows this wonderful structure from the southeast, and the very first thing that strikes the student is the complete subordination of the whole exterior design to the need of properly arranging the architectural effects of the interior. That prodigious scaffolding of upright masses of cut stone, with sloping bars, supported each on its own flat arch and serving the purpose of carrying the thrust of the high vaults across the inner and higher aisle and then across the outer and lower aisle, — all that strange forest of uprights and sloping bars is put there not

for its own sake, but for the sake of the interior. It was essential that there should be a great vaulted roof rising a hundred feet above the pavement ; and



FIG. 202. Le Mans Cathedral from the southeast

another vaulted hall, half as high, drawn around that central nave on three of its sides ; and again, a third, still lower, enclosing the two structures named above. Furthermore, the spirit of the time called for a half ring of chapels, six in number, with a much longer one at the extreme

east end, and again for still more chapels along the straight wall of the choir, so that altogether thirteen of these projecting *édicules* surround and enclose the choir and its two ambulatories. All these stone-vaulted apartments and compartments were required to open into each other freely, with the smallest possible uprights to carry the roofs and with the largest possible windows, both above and below; "a stone roof on a glass wall." For the purpose of getting this effect, that system of buttress and flying buttress which we find so amazing in the exterior was devised and gradually took its perfect shape; in developing itself in this way it assumed more and more comely forms; that was a necessary result of the devoted work of many a patient and enthusiastic worker in elaborate stone-cutting and of the controlling influence of many a wise master of the works, even perhaps of more than one ambitious and sensible bishop. And this is the most constructional of all architectures. No other style has ever been so purely logical as the completed Gothic of France; no other style has shown so much enthusiasm on the part of its builders for constructional methods taken by themselves and made the most of. And yet even here it is well to look close and see how much there is that is not logical—that is not mere constructional skill and consistency—how much there is that is pure designing in what might be taken to be almost abstract form.

What determined the exact placing on the front of a buttress of a niche with a statue of a saint rather larger than life size? What determined the height and the pattern of the different parapets? What was in the mind of the artist who made the cornice with its hollow cove and its rich floral sculpture underneath each parapet? As for the window openings, what decided the exact curvature of their intrados and the section of the mouldings which diversify the whole mass of the cut stone arch itself? And, finally, what determined the exact height of each of the aisles with relation to the other and to the main nave, the great vault between? Of course a practical need thrust itself in; the need of enormous windows in the clearstory is the real reason for the lofty and so-called "aspiring" character of the Gothic buildings; but this is our immediate subject here, —the way in which that need was satisfied. The builders liked well enough to brag of their high vaults and to say that they were so many feet higher than the vaults of the neighboring cathedral, but the big windows were the primary thing — windows which must come below the stone vault and above the aisle roof, and yet be prodigiously large. So much for the general tendency; that was a growing out of a demand for practical convenience; but how about the exact proportions between high and low, between upper and lower, between the steep roof of the main

choir and the almost invisible low roofs of the aisles; and again with the pyramidal hipped roofs of the chapels? It was no manual art which could determine such general questions as those; the art of the supervising artist, the man who thinks out such questions about mass and slope and resulting sky-line, is what we find expressing itself here.

Of course if we were to go to the west front or the south transept; or if we were to go a few miles away northeastward to see the north and south porches of Chartres, or again, a few miles northward from Chartres to see the porches of Amiens — in either case we should find reason enough to take back any opinion we might have expressed too rashly as to the purely constructional and logical working of the Gothic designer's mind. But this is not necessary to our present argument. We are considering only what seems to be obvious enough, the fact that there was very much else in the mind of this designer than mere logic and mere constructional propriety. It is that something else which we have to consider in what remains of this chapter; and the extreme difficulty of explaining it, and showing what architecture is when conditions are wholesome, is only to be matched by the difficulty of explaining the reasons for the conditions not being so good, as for instance in the twentieth century.

There is the matter of massing and grouping.

A building may be so planned as to suffice perfectly for its practical uses, and may be so designed as to express in its external and internal design the character of the plan and also the character of the structure, and this will be a great and noble thing and one very rare in modern work, and yet that building may be clumsy in its masses. If it has a diversified plan with wings that project or retreat, and a central mass which dominates or might dominate them, and again minor structures around it like gate-lodges and stables and other offices, and even stone posts supporting or maintaining an iron grille ; it may be badly grouped as well as badly massed. Moreover, that which is well grouped when considered from one point of sight may be less good, or even bad, when seen from another ; and this is more apt to be the case the more elaborate the plan. Thus in Chapter XIV of the present work the court-yard front of the château of Josselin as seen in Figure 96 is a study in repetition and monotony ; but look at it from the point of view taken in Fig. 203 in the present chapter, with the changed perspective and the strong shadows, and the whole design changes its character. And note that all this has to do with a single court-yard front, and note again that much of this is accidental, or mainly so. The towers of the outer wall were put where they are for purposes of defence, not picturesque effect ; and the appearance of their conical roofs had to

be accepted rather than utilized in the design of this façade.

Take then a design in which it cannot be thought that accident has been for anything, one



FIG. 203. Château of Josselin ; part of the front shown in Fig. 96, under different conditions

in which the artist and student of proportion may be thought to have had everything his own way. Figures 204 and 205 show the château of Maisons-sur-Seine which nowadays is called Maisons-

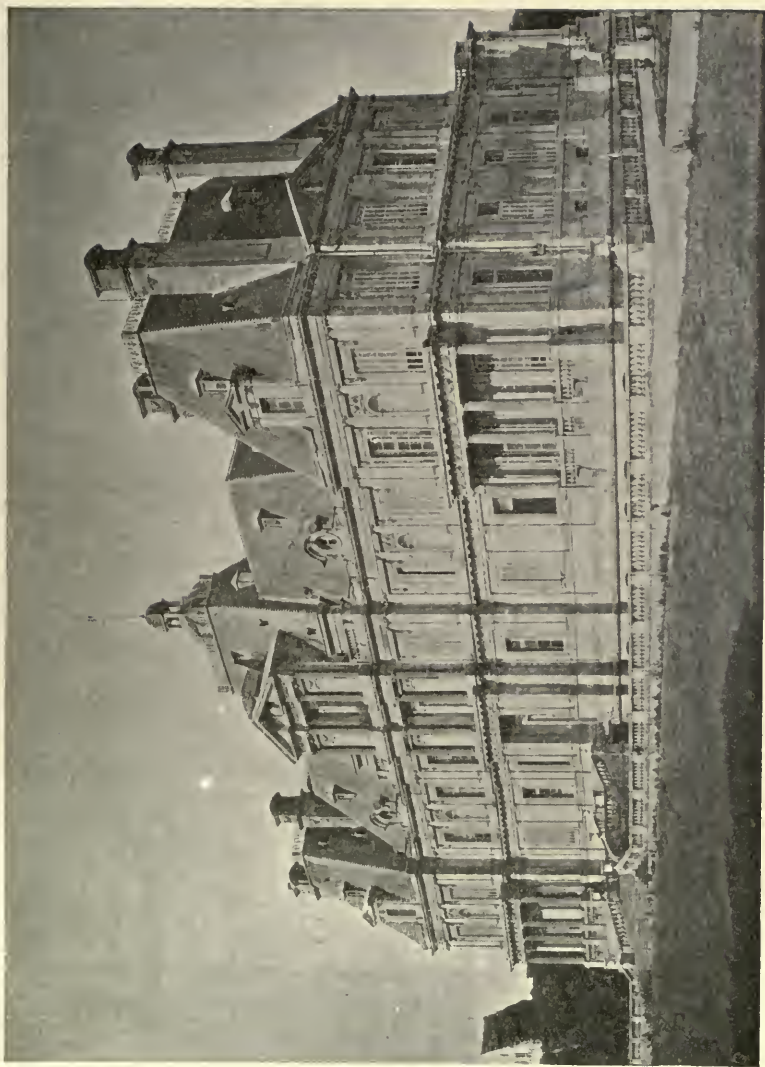


FIG. 204. Château of Maisons-Laffitte (Seine et Oise), garden front

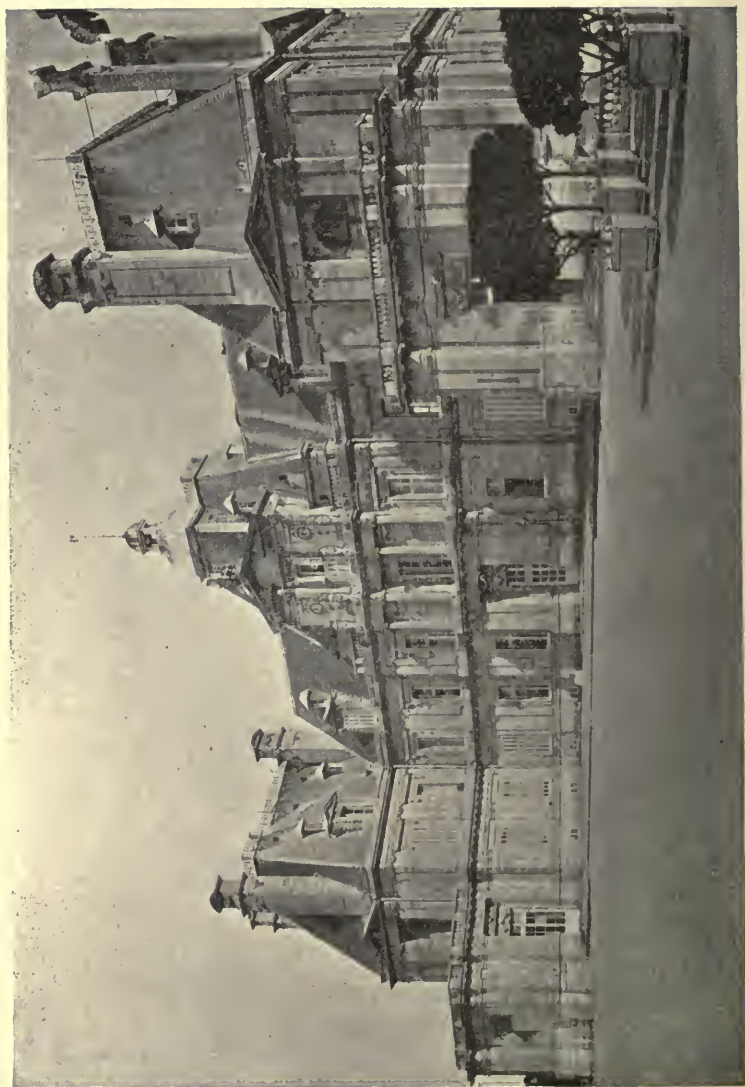


FIG. 205. Château of Maisons-Laffitte, entrance front

Laffitte. Figure 204 is the garden front, cut off from the grounds by a continuous open area with parapet and pedestals, and this spanned by a monumental perron of some twenty steps. Figure 205 is the principal front of entrance with the

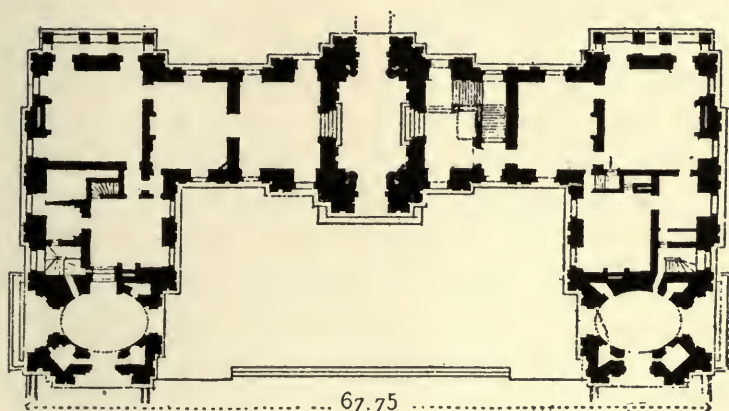


FIG. 206. Château of Maisons-Laffitte, general plan
(From "Normandie Monumentale et Pittoresque")

cour d'honneur, shallow in proportion to the size of the building, and yet imposing enough. Figure 206 is a block-plan of the château. Now it is evident that the elder Mansart, the artist who built this palace in 1642, had his way with the design. It is evident that nothing in the domestic requirements or in the financial resources put at his disposal restrained him in any way, and that he was free to complete his work as he understood it. Furthermore, it is quite evident that every part of the visible structure is logical, and that, while there is no resort to extraordinary skill in

building, and while the whole is almost as simple as a Greek temple, there is yet a perfectly intelligent handling of those modern classic forms, the pilasters and columns, which have no real work to do and are accepted as necessary parts of a rich seventeenth-century design. It is worth noticing, however, that while the architect was satisfied with a very flat front in the one case, the projections having only the width of a pilaster, or of two pilasters with a very small strip of wall between them, on the other front he has revelled in wings projecting thirty-five feet or more from the main front; and again the one story pavilions project nearly as far beyond the high wings. It does not need protracted examination to see how different are the two programmes, and yet these are admittedly coherent parts of the same very worthy and important design. Again, Fig. 207 shows the principal front from a considerable distance, with the two pavilions which flank the entrance to the park. It is to be observed that the architect must have kept in mind always this distant view, and the mass of the château seen dark against the sky; and this again as an inevitable centre of a group made by the château itself and its two pavilions. The point to observe here is the complete freedom from any question of constructional purpose in all this. The designer of such a building, the chief, the man whose sense of form and proportion was active and creative in this work,

need not have been a practised builder. If he knew enough of the simple processes employed



FIG. 207. Château of Maisons-Laffitte from the southeast

not to insert some novelty which would involve a piece of unsafe building, he was then free to design in the abstract, to take a lump of clay and to model this great building exactly as the

monument to Watteau was modelled, as seen in Fig. 20.

Much of an architect's artistical task is contained in such disposition of parts as we see in Maisons-Laffitte—much, but not all. Let us now consider what are, when reduced to a tabulated form, the different tasks to which the architect sets his hand; and what gifts he must have to achieve them.

I. He must know how to mass, how to group and proportion the larger parts of his building; and that necessity is well explained in the building last discussed and shown in Figs. 204, 205, 206, and 207. To know how much he may project the wings or flanking pavilions beyond the main mass, and the terraced vestibules beyond those wings again, is to know what is very precious to him.

He must know how to use his large details, his porticos, pavilions, towers, porches, gables, huge chimney-stacks—he must know how to put them into the main mass of the building where they are needed or seem to be needed for other than artistic reasons, and yet where they are certainly needed for those very reasons of design. And yet this is not exactly what is called proportion; see III below.

II. He must have a feeling for the smaller details, for the capitals and bases of columns and mouldings around windows; and not merely these, but also the more rich, elaborate, and unusual details which go to make up what we call architect-

ural sculpture. The château of Maisons-Laffitte is covered with carving, capitals of pilasters and of columns, very elaborate sculptured trophy-like compositions in the upper entablatures, shield and helmet in the frieze of the lower order, medallions surrounded by wreaths and dropping floral pendants, festoons of fruits and flowers and fluttering ribbons, vases with sculptured forms, with festoons ornamenting their rounded bodies and lion-heads wrought upon their pedestals. This decoration is carried far up into the sky on pediments and huge chimney-shafts. It is not used in an economical way. There is great cost and much thought, the result of which hardly shows, given to that which cannot be said to modify the general effect seriously, nor even to gratify the eye of one who approaches the building near, except as imparting a general sense of richness and cost. So in the front of St. Paul's Church (see Fig. 210) the statues against the sky are badly placed, for the light of the sky — even of the gray London firmament — eats them up, destroys their outline, and invades their mass. The sculptures grouped upon the towers are better in this respect; those of the front are the four evangelists, treated in that fluent and dashing style which the sculptors affected in the early years of the eighteenth century, and therefore they are, as sculpture, out of keeping with the dignity of the architectural mass, but they help that mass — they help the building well. So the sculpture of the pedi-

ment with the vision of St. Paul may offend many prejudices in its composition and the way in which the triangular panel is filled with carved forms, but the design is helped by those elaborate forms and by the play of delicate light and shade upon their rounded surfaces. So the panels of relief sculpture dimly seen in our picture on either side of the great porticos help the front in quite a surprising way, and even the rather meaningless carvings in horizontal bands, the "lamps with flames" forming pinnacles upon the steeple, above and also below, the carved hood-mouldings around the clock and its corresponding circle on both towers, are effective in a way ; in fact, the front is an instance of how a generally well-proportioned and well-conceived but cold and bare façade is humanized, is brought near to us by the use of carving. If that is true of a style which ignored architectural sculpture and despised it on the whole, it is exceptionally true of those styles which glorified sculpture and included some manifestation of it in every important architectural scheme. Fig. 208 shows a part of the great rose window in the front of Reims Cathedral, with the sculptures of the outer rim or hood-moulding or drip as they were before the elaborate repairs of 1885 and thereabout. It is chosen that the reader may see the more readily the way in which the hollow moulding has been carried under and behind the leafage. Vine leaves and grapes alike have been left in relief so high that it is essentially



FIG. 208. Reims Cathedral, west front ; detail of rose window above middle door •



FIG. 209. Reims Cathedral, south transept, west side of porch ;
the photograph being reversed

carving in the round, while behind them the hollow moulding has been carried, spreading its deep shade in a band to relieve the forms of leaf and fruit. There is finer Gothic sculpture than this, but it is hard to select a better example of our present theme; and moreover this picture (Fig. 208) suggests the further requirement that the architectural artist shall know how to place the representative and significant sculpture, the statues and statuettes. Consider Fig. 209, where in the same cathedral the great southern doorway is seen to bend its arches above the entrance, the window above, the sculptures on the lintel and the much more magnificent sculptures of the jamb or flank of the portal, while at the same time the arched canopy itself is covered with statues on a small scale, angels beneath canopies, angels in couples and alone, angels with viol and flute and with scrolls of sacred words. It is easy to see that a man may be an excellent sculptor and yet have no power of combining seventy statuettes and a dozen statues of greater than life size, with decorative reliefs, into one prodigious composition.

III. He must be a good natural judge of proportion; of what is fine and what is not so fine in relative size, relative curvature, relative verticality, horizontality, or the like, — a good natural judge, because this is a gift which does not come by study, which does not even grow very much from study. One child in the kindergarten will show a power of

determining the relative size of the colored papers which he weaves or pastes into patterns, and will do it instinctively and often in spite of his teacher (it is a thing which all observers can confirm), while another child will not learn the trick. And the constant recurrence of the demand for a system of proportion, for a discovery of the methods followed by great designers in the past, for a search after their theory of diagonals and ratios, is a new proof of the evasive character of this power of design.

As illustrating these requirements consider the west front of St. Paul's Cathedral (Fig. 210), and note especially the two colonnades, one of which embraces the front of the nave alone, covering only the west front of that member of the church and leaving outside of it to left and to right the hollow panels which mark the break between nave and aisle, and the curious court-yards within above the aisle roofs, — long-drawn, narrow, open spaces ignored in the external design of the two flanks. If these recesses are excluded from the upper colonnade, so all the more visibly are the towers separated from it, and yet the fronts of the towers and their outward-facing flanks, the north and the south, are bound to that upper colonnade by the continuation of the order, pilasters replacing fluted columns, but the entablatures remaining the same throughout its huge breadth. Note, then, the lower colonnade and see that the great order

of coupled, fluted, and reeded columns grasps the two towers and unites them to the general façade (for such it must be called) not merely by the



FIG. 210. Saint Paul's Cathedral, London ; west front

(From Uhde's *Baudenkmaeler*)

continuation of the order through a series of pilasters on front and flank, but also by projecting with its own deep, shadowy roof boldly in front of

the corner piers of the towers themselves. Then consider the proportion of the columns to their entablatures, and of each and both together to the podium, the basement wall, and the flight of steps below ; take this double colonnade with its pediment and its sub-structure together as the principal feature of the front, and note the way in which it is flanked and reinforced by the towers, rather clumsy in themselves, but fulfilling their mission. The two requirements, a feeling for proportion and a feeling for the marshalling of great details, is excellently well expressed in that very dignified and very intelligent front.

All these things come within the scope of the architectural artist, and besides them, there is (though less regarded) the subject of color, for which we may refer to Chapter XVII and Figs. 122 and 123, together with the mosaics shown in Chapter XVIII. The further development of color in architecture is rather the business of the mural painter and of the mosaicist, and to him the architectural artist must make way, in a sense. He must provide space ; but no marshalling of parts can be asked of him when the elaborate work of the painter or the artist in mosaic is to be considered. Sculpture the architect must sway ; and even in the few elaborately wrought porches of our own time with statuary and relief, the architect claims such control that the main lines even of the carved frieze are of his laying down ; but

such control cannot be asked for in the matter of color decoration.

All this is the work of the architectural artist, though of course he does not undertake all these different labors in each and every building which he projects. In fact, the tendency is constantly away from such elaborate considerations and from such purely artistic tasks as these, because of the always persistent demand for complexity of plan. The modern dwelling, with its variety of rooms and passages, stairs and porches, cupboards and corridors, throws down the challenge to the architectural artist, daring him to make anything of it as a design. The modern state-house, court-house, or library is beset with similar and even more self-assertive requirements within; but the dwelling is sufficiently complex to task the best wits of our time. Given a house, large or small, in city or country, planned conscientiously for the true comfort of the inmates with all their varied demands as the twentieth century has made them, and you will be a successful man if your house, seen from any point of view without, or viewed within as you pass along its principal vistas, can present a really gratifying aspect. Do you even think of asking that your house shall be beautiful within or without in the way that a Greek temple was beautiful — or if that is unreasonable, in the way that a Renaissance house in Venice or Dijon or Hildesheim was beautiful?

It is indeed one of the main duties of the twentieth-century architect to be as comely and as decent in his work as he can be in despite of the impassable barrier erected between him and wholly successful designing. This duty is often well discharged. There are many dwelling-houses, there are some churches, and there are even a very few buildings for governmental or municipal purposes in which the designer has done what he could without too much effort and also without too violent a break with the old traditions, — traditions which hold strongly in spite of the new requirements which draw in a new direction. That which, as yet, the architects have failed to do, is to discover a method of design for the wholly new buildings of the time. The lofty business building, a mere scaffolding of wrought steel around which a coat of masonry is to be drawn to save the iron from fire and from water, has not yet found its consecrating genius — has not yet taken shape as an architectural possibility. And yet the great cities of the United States are crowded with these buildings, lofty structures upon which money in millions has been expended in the desire to make them serviceable as office buildings, and in the farther attempt to make them so attractive by the addition of marble and mosaic, sculpture and wrought iron, that the offices may be kept full even at high rents. The difficulty is partly in that very fact, — the fact of the purely

commercial purpose of the building. A purely commercial purpose has never resulted in anything original or anything very fine in the way of design.

Chapter Twenty-Seven

DECORATIVE TREATMENT OF INTERIORS

THE subject of this chapter differs from that of Chapter XXVI in that it has nothing to do with building, and from that of Chapter XXVIII in that it deals with buildings; that is, with the question of how a room, staircase, or corridor may be made attractive in itself. The great art of architecture, complex and many-sided as it is, depends upon excellence and permanence of building as a primal necessity; but this matter of the adorning of interiors may be of the most temporary nature.

Every one who cares for architecture would prefer to have the inside of a room adorned by its own structure and necessary fittings; only that this cannot be done very often in modern times. In a church, for instance, it may be done. The inner face of the walls may be of the actual masonry, shown as freely as in the outer face; color and form used architecturally in the one as in the other surface. So, if mural paintings are allowed, or if the timbers of the roof may be painted in color-patterns, or if windows of rich glass are to be had,

nothing of these is inessential, for there must be walls and roof, timbers and glass. Even a high dado is essential; it will be of oak and richly carved, or of slate or marble and inlaid; it is needed in one form or another. Something of this may be had in the corridors and staircase halls of a large and massively built building, — bank, college, State-house, city-hall, or even private house of pretension; but in the ordinary dwelling or business building or the cheaply built bank or church or town-hall, it will not be attainable; there the plaster-faced wall and ceiling, and the plank flooring are the conditions precedent; the room is “turned over” to the owner in that state; it is for him and his adviser to adorn it.

Take a very simple case and suppose that a fairly well lighted sitting-room and dining-room nearly adjoining, with perhaps a reception-room or small drawing-room across the hall, are to be made as pretty as circumstances will allow. It appears at once that the possessor of these rooms must decide whether they are to be adorned somewhat richly by permanent decorations, made a part of the house; or whether, in view of the fact that there will be exposed in these rooms many portable works of art of some importance, it may not be better to treat the rooms with extreme severity, and literally to provide the best possible background for the pictures and porcelains which the owner may have to show. Let it not be sup-

posed that this is a fanciful question. It is at issue in the case of every house owner who is fortunate enough to possess two or three water-color drawings; a few framed prints, whether from etchings, from old-fashioned line engravings, or from the modern photogravure plates; some pieces of French or of Oriental ceramic ware, especially such plaques and platters as can be hung on the wall; some bronzes; some Japanese brocades or embroideries; a rug or two of delicacy and beauty too marked to be used as a floor cloth; an oil painting or two; or any of these things. The owner of such treasures will find that if he employs a decorative artist, whether he is called a painter or an architect, to divide up the walls with such arrangement of panels and their enclosing stiles and rails and mullions, or in a more grandiose way, with pilasters and the like, he will never be able to show his portable works of art properly. The extreme of this condition is to be seen in cases where much money has been spent upon the internal decoration. Thus, where a palace room of the eighteenth century has been purchased complete, for the American millionaire — tapestries, woodwork and chimney-piece, altogether — and set up within rough brick walls planned for the purpose; or where such a decorative interior has been faithfully copied in new work, it will be found that the fixed adornment of the walls absolutely forbids the hanging of pic-

tures ; the arrangement of the panelling prohibits the introduction of bookcases or cabinets with convenient tops where vases and statuettes may be set ; the system of chromatic decoration forbids any color effect except that which has been provided in advance. So, in certain very finely designed rooms of 1900 and thereabout, the smooth stone dado eight feet high may allow of three or four large paintings hung upon it and well relieved by its cool, neutral gray, but how about the host of minor pieces which the owner and the architect would bar out because they clutter the room — take away its dignity ? They are finer things than the room, of course ; they contain more thought, finer designing, richer color, nobler and more subtile form than the wall decoration can present, and yet they must be relegated to closets and dressing-rooms.

Now, of all the different requirements of an interior there is one of primal importance. It is beauty of color. If ever you find that a private sitting-room delights you very much and that you long for a photograph of it, resist the temptation to order one or to ask for one, for you will be disappointed when you see the photographic print. The charm of the room is almost sure to be in its beauty of color ; and your photograph would give you a shock of disappointed surprise. It is indeed practicable to give such beauty of color, not to be described or reproduced, by means of

the permanent interior adornment of the room, and of this a word is said below ; but as a general thing the beautiful interior, at least in modern city and country houses, will be found to be made up of a number of what seem unrelated parts, which however form a complete whole of singular interest. The rugs on the floor, the curtains at doors or hanging at the sides of the windows (for opaque stuff is now less often drawn across them, shutting out the precious light of the sky coming through the uppermost third of the window, — that light by means of which the beauty of the interior can alone be judged), the light and shade and the subdued color of a carved cabinet, a group of five or six water-colors hung on the wall, and behind them arranged perhaps a piece of stuff of deep and rich color to “set them off” and give some unity to the group, a great round dish and half a dozen smaller ones arranged in some simple combination so that colors and forms aid one another to delight the eye — these are what make up the beauty of our most beautiful rooms. The beauty of color easily reached in this way cannot be secured in ordinary “mural decoration.” It is only where very great cost has been incurred under the direction of first-rate talent, where the painting of a most able and practised artist can be put upon the walls, that any of the permanent aspect of the room will be of value comparative to that of the portable works

of art which even a moderate purse can buy. There are very few instances in which any similarly successful treatment has been achieved by the use of the natural lining and adornment of walls, ceiling, and floor. The reasons for this are partly explained above.

Obviously the owner and student who arranges such a room as this, plain in itself but full of artistic riches,—obviously he is doing curiously unconscious and inevitable work. His pieces have not been chosen—it is impossible that they should have been chosen—with the primary object of suiting one another in a general scheme of decoration. He has put into place his Chinese porcelains with their strongly marked flower-patterns, or his Persian dishes with their melting blue, or his Japanese silk robe in which embroidery helps the art of the weaver, and painting, actual painting with the brush, is called in to complete the design—he has chosen all these, not deliberately, but because in each case he has been unable to resist the temptation. The piece has been too irresistibly attractive, and he has felt the hunger of the mind which can only be satisfied by its immediate possession. Now, when it becomes expedient to put these works of art where they can be seen upon his walls, the matter of their arrangement is instinctive in a very high degree, nor can the most experienced disposer of such artistic treasures say, an hour in advance, how he

will arrange his room. From this point of view the art of the decorator, using such diverse and seemingly incongruous materials as these, is of a rather high order. The result will be appreciated, and the real merit of the work understood, only when it is found that the pieces can hardly be changed from the position which, after two or three days of experimenting, they have received. Try to take down the dish brilliant with *reflets métalliques* and you will find that it will take you another day to replace it by something else, or to create the new arrangement of the wall which its absence has made necessary.

The beautifying of a room, or of a dinner-table, by means of fresh flowers, is hardly to be considered in the same light. The flowers are in themselves not only lovely, but also attractive in a sentimental way to every person, and are more esteemed for their own sake during the brief moment of their existence in freshness and beauty than are the important works of human art on the walls. You deliberately sacrifice other things, or at least put other things aside or out of mind, to display your flowers to the best advantage. It is hardly the adorning of the room that you have in mind when you put flowers here and there in pots and baskets, it is rather a floral display that you are making; it is not that your mantelpiece is more beautiful because of the flowers arranged along it, it is that the mantelpiece affords you a

good place to show your flowers off. So, in the adornment of rooms with dwarf palms in pots and large-leaved tropical shrubs whose leaves are washed in the morning to preserve their full lustre, they are planted in their showy vases chiefly for their own sake and because the eye, turned indoors by city residence or by winter weather, longs for green luxuriance and freshness. This is as it should be, and a somewhat similar rule seems to hold in the matter of floral arches and displays of garlands and festoons out of doors, on an occasion of some festival — as partly explained in Chapter XXVIII.

Consider now how the room may be treated by the painter or the paper-hanger and calciminer, together with the joiner. We have not to think of the details of pattern or of woodwork, we think only of the general treatment in color and form; and it will be seen that very simple appliances are all we need to use. The dado may be high and so smoothed and so colored that pictures of one or another kind may be hung against it. In that case it had better be seven feet high, or higher, for nothing is so ugly as a wall divided half-way up; let it be at least seven feet high, with a shelf six inches wide at top, and let the five-foot space above this and below the cornice be covered with something very fine indeed: admirable in color, if not in texture; spirited in pattern, but not too vivid in its hues. Once in many seasons a wall-

paper is offered which is full of fine drawing and good and harmonious color; the wise householder will not then shun it because it is merely paper; it will cost him several dollars a roll, but will be worth what it costs. A piece of textile fabric may be more readily found to meet his wants. Some few of the furniture stuffs are splendid, studied from really fine old designs; but he will not need to seek for heavily woven and very durable material as a wall-hanging, and a piece of thinner silk, or, for humbler surroundings, printed cotton from Persia, the Indian Peninsula, or the Malays of Java, will serve his turn well. A rather sumptuous room in New York had, not long ago, the upper wall covered with simple chintz, made about 1865, blue and white, in a rather stately design of candelabra;¹ and this material was strained on light wooden frames. The dado, in dark wood, made a good background for pictures of many sorts. The narrow shelf which naturally tops such a dado, forming its cornice or surbase, allows of standing up a row of dishes and plaques, easily removed or changed.

A more usual plan is, certainly, to have a very low dado, if any, and a broad surface of plastering which is either painted or papered; and there is

¹ *Candelabrum* (plural, *Candelabra*): in architectural decoration, a column or pilaster twisted or otherwise broken up and shown as merely decorative, or even as a mere upright band having the appearance of a supporting member.



FIG. 211. Drawing-room of private house in London: decoration of about 1885



FIG. 212. Hall of the Brewers' Company, London City.
The small Court-room
(From Belcher & Macartney)

no difficulty in securing a rather fine effect in such work. Plain, grave color, rather dark than pale, is so often thought desirable that textile material such as "burlaps" has become common; the soft, woolly surface does not reflect light in an annoying way and the neutral grayish tints serve as a background for works of art. Similar results are indeed to be gained, when expense may be incurred freely, by the use of tapestry (see Chapter XII); but tapestry has so much pictorial and decorative character in itself as to defeat all attempts to show works of art relieved against it, unless they are pieces in solid and even massive form. Statuary and great bronzes look well with a tapestry background, and so do large and highly wrought cabinets; and the cabinets may support great vases of majolica or Chinese blue-and-white, but pictures are almost ruled out.

Fig. 211 shows a room of which the walls are simply covered with a flat pattern except where a dado about four feet high (too high, perhaps, for a low dado) covers the lower part. The ceiling is an excellent study of English Jacobean plastering and is most effective; needing no color treatment, the which is replaced by the delicate play of light and shade on the mouldings and floral ornaments. Still, however, the modern love of fine art of many kinds in transportable forms, which partly makes up for the modern ineptitude in architectural decoration, is seen to be at liberty, and even in the ascendant, in this room. Fig. 212 is a seventeenth-

century London interior unaltered except for the modern ceiling, which has no character at all. This decoration is nearly sufficient unto itself; few pictures could find a place, and there could be shelves only in a press specially prepared. Fig. 213 is a room of the greatest possible splendor, with richly painted ceiling and the walls everywhere adorned with delicate reliefs and painted panels; a few canvases framed in the wall. Fig. 214 has tapestry on the walls, but strained on laths and enclosed in frames. It will be seen that in neither one of these two splendid rooms (Figs. 213 and 214) could the indweller house himself and his portable works of art. A room hung in the proper way with arras, even if not so spaciouly as to accommodate Falstaff behind it, would give an even less favorable reception to the easel picture and the suspended platter.

Most noticeable in all these examples is the fact that the task of the decorator has been to bring together much manual work of many kinds, to systematize, to organize, to decide in advance upon the colors to be applied, and the kind of surface required for their application. Except where the adornment of some part is to be very rich, as where a ceiling is to receive figure painting, the director of the whole system need not be an artist in the technical sense of the word. Nowhere is the interior adornment a part of the structure. In that at least modern men have learned the lesson

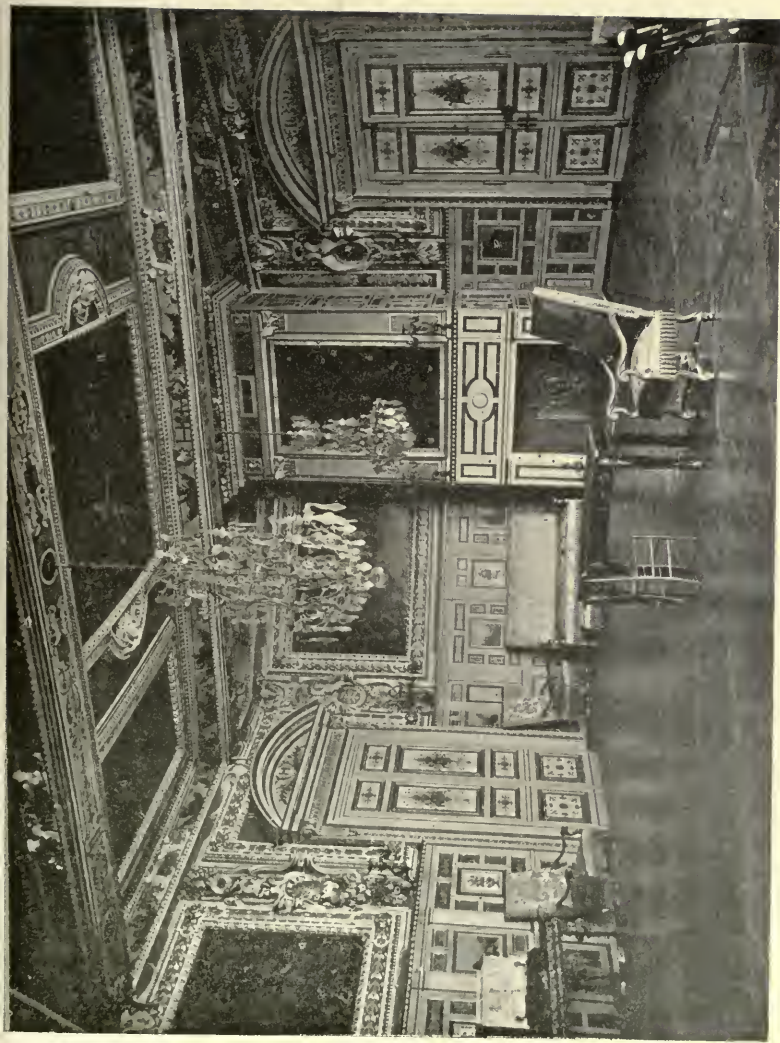


FIG. 213. Palace at Fontainebleau. Salon of Louis XIII or "oval salon," on northwest side of "oval court." (The decoration is of the general style of Henry IV, but much altered during different reigns)



FIG. 214. Palace at Fontainebleau. Salon of Francis I, on the northwest side of the "oval court." (The decoration is not consistently of any epoch; it is French Renaissance in general style, except in the smooth and tight-drawn tapestries)

taught by their Roman masters ; in vain did the less studious twelfth-century men use their bold initiative, and lead their immediate successors along a different path ; Europe came back to the Roman way as soon as it had become learned and self-conscious. The richly adorned room from 1620 to 1900, the period within which come all the illustrations of this chapter, are instances of this "Roman" way of going to work. The bare brick, plaster, and timber are turned over to the decorative artist, who brings in his panelled wood-work, his strained canvases, his parquets and his marqueterie, his transportable chimney-piece and pilasters, his tapestry or burlaps, brocaded silk or printed cotton, and affixes these to walls, roof, and floor in a semi-permanent way. Then the art student who had rather purchase his own detached and self-contained treasures will decline to spend the money needed for the elaborate *mise-en-scène* of the ambitious decorator. Fig. 211 shows how the Englishman of many tastes and of literary renown likes to treat his sitting-room. The chimney-piece (not shown on the picture) is fine and costly ; the plaster ceiling is studied from Elizabethan or Jacobean originals ; but the other permanent fittings are cheap enough and of no pretension. The smooth walls allow of the placing not quite "on the line" but still within reach, of his favorite water-colors, of many large, round dishes of brilliantly painted porcelain or faïence,

and at the other end of the room, of a Persian helmet, vanbrace, shield, and axe, of elaborate decoration in wrought steel; the bookcases support a huge vase of old Japan and smaller pieces of ceramic ware. It is in this way that the modern mood of general inquiry and diverse pursuits, at least in the way of avocation, leads nearly all of us; and this is not compatible with palace-like interior decoration nor with any interior treatment, where the artist has had his way in the original building and finishing of the rooms. The country houses of the eastern United States were once adorned with panelled partitions, panelled door-pieces and dados, broad friezes of stucco or "composition" in delicate relief; they did not leave much room for the collector—but then their owners were not collectors, and imported even their tall clocks and their sideboards for purposes of elegant utility.

In many chapters of Parts II and III and especially in Chapters VI and XII, there is reference to these non-manual arts as often combining in themselves the results of those arts of handicraft. Such combining of works of manual art, of painted pottery, glass in some one of its many forms, textiles of rich design, embroidery, joinery, carving, and inlay—even dyeing and printing—is especially noticeable in the interior decoration of dwellings. Every one of the mechanical processes treated in Part II may be put to service in such adornment.

Every one of the fine arts of hand-work treated in Part III, except, perhaps, those treated in Chapters XXI and XXII, finds its normal use in such rooms if a little extra magnificence be given them. The careful treatment of Eastern rugs, the dyeing, the preservation and study of ancestral designs, the weaving, the shearing; every art used in the completion of a splendid old cabinet, carefully planned, elaborately thought out in design, skilfully built, delicately made by the joiner, adorned with sculpture and inlay or with painting and gilding, — these and their congenital arts of decoration united with the delicate water-colors, the stately oil paintings, the refined and significant sculpture of the best periods, go to make our rooms of ceremony splendid: and success in this very noble art of adornment requires of the artist nothing more than a fastidious good taste joined with rapid and dexterous manipulation of the material at hand. Only those gifts: and those gifts are not quite as rare as we are apt to suppose, inborn as they are in very many persons who have scarcely given themselves a chance to discover their own capacity in such directions.

Chapter Twenty-Eight

DECORATIVE TREATMENT OF LANDSCAPE

NO term has been introduced which would cover the subject of this chapter. The terms landscape gardening, and more recently, landscape architecture, can have no proper application beyond the treatment of the face of the country itself, or of a limited piece of it. When, as in the case of our public Expositions, national and international, there is a serious study made of the placing of different buildings with regard to one another and of a treatment of them in form and color so as to agree together, to aid one another and to produce a pleasing general effect, the application of the terms given above to that subject is inexcusably loose, but there are no other terms to use. In like manner, when one of the most important subjects of the landscape gardener's art is to be considered, namely, the helping of the design of a country house or the like by means of a tree or a clump of trees judiciously placed, the act of doing this, although it may be a part of the pro-

fessional work of the landscape gardener, cannot be considered landscape gardening.

This statement of the difficulties of the definition in this case seems necessary as a means of fully explaining the purpose of the inquiry here begun.

The general lay-out of the great villas on the slopes of the Alban mountains south of the Roman Campagna, and the similar disposition of the slopes above Genoa are the earliest important examples of landscape art which are well known to us. It is indeed of the greatest probability that in the original arrangements of these great groups of buildings, of trees, of terraces, and of artificial slopes one rising above another, an Imperial Roman model was rather closely followed. There can be but little doubt that the tradition of the gardens even of the great Julius "on this side Tiber" are to be traced, if one had information enough, downward through even the hideous waste and destruction of the earlier Middle Ages, into the gardening of the fifteenth century. Simil's admirable restoration, studies of ancient art which are none the less valuable because not explained in words, but simply set down in line and mass, insist upon this decorative treatment of the country close under the walls of Rome, although no great villa is shown nor any recognized public promenade. No greater service could be done to artistic archæology than such an exploration of the villa of Hadrian at Tivoli, or some other great mansion,

that the substructures of garden houses, terraces, raised and sunken promenades, and the like should be studied, as carefully as the remains of the main building, in order that the whole elaborate scheme of the out-of-door design should be traced. If the money were allowed for a thorough excavation at Herculaneum, so that the "Villa of the Papyri," from which were drawn those great bronzes which individually and taken together are of such unique importance to the history of sculpture (see Chapters X and XXIV), it might be found that the soft rock has preserved for us the complete disposition of a Roman suburban establishment of the second order—that is of a class just short of the great Imperial villas. As it is, there is but little direct evidence; and yet the general opinion of the students of Italian art is as expressed above—that just as several vaulted halls in the Vatican have reproduced for us the look of an Imperial Roman hall with its paintings on pier and vault, so the gardens on the Alban hills recall those of the second century. That which is most interesting in these great designs, at least to a modern student coming from the North and having very different ideas of the relation between a residence and the surrounding landscape, is the constant mingling of architecture with carefully arranged and displayed vegetation; the constant recurrence of the smooth wall, plastered or faced with marble, accompanied by marble seats, steps, ramps, pilasters, parapets,

vases, pedestals, and statues with what in comparison seems almost free nature. Of course the subject of topiary art¹ does not of necessity include the clipping and shaping of trees and shrubs; it is fortunate that the more important Italian villas are not disfigured by that device; their trees grow as nature bids them grow, or nearly so. They have been planted with special thought as to their position, and some use of the gardener's shears is thought necessary to keep them within reasonable limits, but so it is in the simpler gardens of the North even under a régime of naturalism.

It may be stated, then, that landscape gardening from the fifteenth to the eighteenth century was in the main an enlargement of the mediæval walled garden, the *plaisance* with its apple trees surrounded by ramparts which on occasion might serve for defence, and yet an enlargement carried out on semi-classical lines with a constant reference to what antiquity had done or was thought to have done. In Italy this was easy; in the North, neither possible nor asked for in anything like Italian thor-

¹ *Topiary Art*: the art of non-natural gardening; that is to say, gardening in which plant forms are used in deliberately made combinations to produce effects not like those of nature. The most marked form of it is the clipping of trees and shrubs into spheres, cones, and other systematic forms. In some cases a single tall and rather slender tree has its foliage so trimmed that it resembles three or four oblate balls, as of beads strung upon the trunk, which is visible between them. The term is extended to cover all forms of highly artificial gardening.

oughness of conception. The smaller garden had its straight walks bordered by trees leading to a tank or stone-walled piece of water, beyond which some seats of permanent material were set up, and these were shaded with trees placed for the purpose. The larger one contained this motive repeated many times on a larger and on a smaller scale, and in addition it had the secondary house, the casino or garden house, where a festal repast could be served, where meetings for conversation were agreeable at certain hours of the day, where a particular view, as of the garden itself with the mansion in its centre, could be perfectly enjoyed. A notable difference between the usage of the Mediterranean lands and that of England was in the comparative absence, out of England, of the smooth green lawn. Even in France a large and unbroken patch of smooth grass, kept rolled and watered, would excite remark; and the large one at Versailles has always been known as "the green carpet," *le tapis vert*. What is the correlative treatment of flat open spaces in a southern garden? It is a covering of that surface with gravel. Nothing is more astonishing to the traveller fresh from England or from those parts of the United States where English gardening sets the fashion, than to find in the Pincian garden of Rome or the Pérou of Montpellier those strange tracts of what seem to him dusty waste. The very promenade of the Champs-Élysées, with its chairs for

hire set upon an endless surface of gravel, while a continuous canopy of the foliage of small trees serves as an awning against the sun — even this is a little of a shock to one who expects grass as the covering of the greater part of the earth's surface, and gravel as that of the deliberately reserved paths alone. The modern treatment of the boulevard in the little French cities, that pleasure ground which Mr. Hamerton praises so sympathetically, is not unlike this. Trees for shelter and for beauty, benches for rest, flower-beds here and there to feed the eye with color — but hardly any surface of grassy lawn.

We are never to lose sight of the fact that this formal and exact way of treating the reserved space around and connected with a country house was uniformly observed, nor ever abandoned until the naturalistic movement of the eighteenth century. In a way Count Rumford of the Holy Roman Empire, that is to say, the Englishman, Benjamin Thompson, born at Woburn in Massachusetts in 1753, knighted by George III, and ennobled by the Elector of Bavaria, — in a way he was the beginner of landscape gardening according to the ways of nature. He certainly directed the design of the so-called *Englischer Garten*, a park of considerable size containing a square mile of nearly level ground; and the intelligence shown in the plan is unsurpassed in more recent work. Frederick Law Olmsted, in

his prime of manhood and in his honored old age, spoke with admiration and sympathy of this noble design. The essence of it is the surrounding of great lawns, flat, as indeed the nature of the ground required, by unbroken sweeps and walls of trees. As we now see them, ennobled by a century and a half of lusty growth, they are of almost unique and unexampled beauty. The roads and the principal paths are concealed by these masses of trees and have almost the effect of what we call in America wood-roads, while as you drive or walk along these thoroughfares constant peeps of flat sheets of grass are obtainable. One of these lawns is twenty-five hundred feet long, nearly half a mile of unbroken turf except that through the centre of it runs one branch of the canalized Isar, the Schwabingerbach, sweeping like a mill race through the quiet grass.

This way of laying out a pleasure ground of any sort became very popular in England because it was the mere extension to the immediate neighborhood of the house of what was the inevitable and the universal arrangement of the great parks in which the English country houses were situated. Those parks are of a magnitude unknown in the private estates of other countries, and where hundreds of acres are left in comparatively unaltered natural conditions with grass growing freely, and great old trees in their natural clumps nearly as they have existed from an unknown antiquity, —

the whole serving as a pasture for numerous deer, or, in parts of the park, for sheep, and in a very few cases for foreign and less known animals, — there has been of course a complete absence of formal treatment. There are no straight avenues because there are no avenues at all except the drive from the great gates to the house, which has to be so long that it is controlled by the accidents of the natural surface, and the minor roads leading to the stables, the fruit garden, and the like. Previous to the date last mentioned above, that is, the closing decade of the eighteenth century, it had been customary to shut off a piece of ground from the great park and to make this, which was nearest to the house, as formal as possible, with paths that were straight, flower beds of exact geometrical forms arranged in a sort of pattern around basins of fountains and “pieces of water,” and all interspersed with retaining walls, parapets with pedestals and other semi-architectural adornments, like the grounds of the great Italian villas named above. This was *the garden*, as distinguished from the open landscape of the park. It was retained, in the nineteenth century, as a terraced or a partly enclosed flower garden, close under the walls of the dwelling. Often, however, with the growth of the feeling for wild nature, it became customary to carry the unbroken and undivided grassy lawn everywhere, and to let the trees and shrubbery, even those nearest to the walls of the house, as-

sume what might appear to be entirely free and unaltered growth.

It was this taste which came to America when, about 1840, there was a marked increase in the number of country places purchased and prepared for habitation by city men. It was at this time that A. J. Downing began his work as landscape gardener, and his writings are of the period immediately succeeding this. The small extent of the American country places made it necessary to study the whole subject afresh, and this is what Downing did. Thus, in the case of a little domestic pleasure-ground of two or three acres, he showed how the road and the paths communicating from the entrance gate to the house should be carried through the grass, not in a straight line, but in curves, and that these curves should be, or should seem to be, necessary, or at least natural, under the conditions of the ground. Thus, if no convenient knoll or clump of trees interposed to prevent the direct straightness of this road, it might be well to plant trees, or to haul from a little distance a great boulder which vines might invest.

Similar rules or methods were followed in places of twenty or forty acres, of which there came to be many along the Hudson. It is noticeable that the objection to the straightness of the road was, not the appearance of the thing on a plan or map of the estate, but the fact that as the road curves it appears and disappears in a

pleasant way among the trees, and even is hidden now and then by slight inequalities of the grassy surface ; while a straight road will constantly arrest the eye as a broad, positive, definite stripe of the undesirable brown or gray material which composes it, interfering terribly with the rural aspect desired. In like manner the trees were to be gathered in clumps and bosquets, or a single tree of sufficient dignity might occupy a prominent place and the road might seem for a while to be leading to it until suddenly it would turn off. In like manner, the question of the relation of the house to the landscape was greatly influenced by the judicious planting of one or more trees at certain points, placed where the ascending and generally pointed mass would agreeably carry out or perhaps contradict the lines of the roofs with their dormer windows and chimneys. It was even quite customary so to place the house as to take advantage of the previously existing tree or clump of trees.

In France and elsewhere on the continent, distributions were different. Although a French forest is far more densely grown with wood than anything in England, and a German wild-boar park is really dense wood like nothing that exists in the British Isles, yet the roads carried through these comparatively wild tracts of country have always been straight, and carried from point to point for purposes of utility. The term "forest" does

not convey to the Englishman the idea of a country thickly grown with trees; but the corresponding terms in the continental languages mean just that, a place in which trees grow high and freely and are only cut with great reserve and with deliberate purpose to keep the tree growth in its best condition. The visitor will stop for half an hour in a forester's lodge in such a wild territory as this and will see groups of wild swine, or of deer, coming rather freely out of the trees and showing themselves at intervals, coming even to the neighborhood of the house to be fed at certain hours; but the moment the visitor crosses the little lawn in front of the house, he will find himself in a dense wood without the least guide for his footsteps. On the other hand, he may take a straight road fifty feet wide and follow it for a mile between overhanging walls of wild growth until he reaches one of the boundaries of the park, where perhaps there will be a gate, or perhaps only a wall which he must climb if he wishes to escape. The peculiarity of the situation is, then, that with all these opportunities on the continent for the laying out of pleasure grounds according to a naturalistic plan, the opportunity has seldom been seized. The great pleasure grounds on the continent are nearly all modelled after those of Versailles. Many and free growing trees are indeed allowed to remain or are carefully set in the proper situations, but these clumps or groves of trees balance one an-

other in accurately prepared divisions of the ground, and correspond to lawns also accurately shaped as to their outline, canals, and basins of water of geometrical form, and straight and very broad walks and drives leading from point to point and frequently arranged in radiating patterns from centres of architectural interest.

The use of water in these different kinds of pleasure grounds is in a curious way a contradiction of the general effect of the two different schemes or theories of landscape gardening. Thus, in the natural plan for a pleasure ground water can hardly appear except in little lakes of irregular outline, and perhaps adorned at their edges by growths of aquatic and moisture-loving plants. The sheets of water do not attract the eye very much; one may walk or drive about the place and see them only at intervals. On the other hand, the water in the formal garden is made the most of; it is continually thrown up in fountains, and what are called cascades are introduced wherever the amount of money to be spent allows of that rather costly adornment. In preparing for these the water is raised usually by some artificial means to a waterhead often treated architecturally, and surmounted by a small pavilion or the like, which, with or without the cascades attached to it, is called by the name *Château d'Eau*. The water emerging from one side of such a pavilion overflows the lip of the basin and thence runs down a flight of

steps carefully arranged to afford a series of leaping cataracts, each very small, but the whole producing a very brilliant effect. In this way the sight and sound of water is always in evidence, and the formal garden is greatly enlivened by these means.

The more costly pleasure gardens of this sort are sometimes adorned by fountains of extraordinary size and kept up only at great expense. Thus, at the gardens at Herrenhausen near Hanover, a single jet of water rises to the height of 220 feet, as the guidebooks tell us, and as the looker-on is quite ready to believe. The rising jet is a foot or more in diameter as it leaves the pipe, and its upward rush is accompanied by a loud and continuous roar, pleasant to hear on a sunny afternoon. Others as large as this exist, and in the great gardens of Versailles there are many fountains of which two or three at least approach in magnitude the great Herrenhausen jet. Another kind of fountain, though more common in the streets of the old cities of Europe than in gardens, is to be seen also in the more stately pleasure-gardens of the continent, namely, that in which the water rises but a little way in the topmost basin but in which it runs from the lip of one basin to another and so on to a third, producing the effect of a cascade except that the water is not thrown in great masses, but falls in a thin sheet with a slight murmuring noise very delightful to the ear. At the Trocadéro Palace on the Hill of Chaillot

in the west of Paris, the cascade built in 1878 begins with a great basin or shell so exactly cut and adjusted as to its edge that the water falls in a continuous veil of broken, almost spiral threads. Most of these different appliances have been used in the United States, though generally on a much smaller scale and without very brilliant results. We have still to wait for the millionaire who will give us a great fountain with the necessary steam pumping-engine which will build up and keep up the great column of water.

This description of the ways of the landscape gardener in European lands has seemed necessary, that the nature of this, the most refined and delicate of all the non-manual fine arts, might be rightly set forth. The designer in this art may be entirely ignorant of botany, as one most eminent landscape-gardener confessed that he was. It was his custom to have the nurseries constantly in his eye. Each variety of tree or bush which the arboretum or nursery afforded was known to him as a perfectly definite element in a possible artistic design; it was massive or loose in its growth; it was of such and such a green, and the leaves gave so much sparkle and play of light, as the wind tossed them about; it would grow with such and such speed, and a given number of the plants would fill up a space in so many months. In all this he used his material exactly as an architect might consider stones and blocks

of terra-cotta, without knowing anything whatever of their mineralogical or industrial nature. The designer of landscape effects visits the ground, walks over and about it, considers its various possibilities and the practical necessities of the case, as the communication with the high-road, the desired exposure of the house, etc.; and the chosen way of treating that piece of ground becomes more and more a necessity obvious to him. The Japanese garden, that marvel of delicate gradation and daring contrast, is just such a problem to its designer. It may be said that for the time being the one plan which he decides to follow is the only one of which he can conceive, although it is quite possible that a month hence and under different conditions, as with more or less money to spend, or with an increased or diminished area to treat, the whole aspect of the case would change for him. His idea of the disposition of the ground is a thing which is to take shape slowly and as a result of the labor of others. He, the designer, is merely the maker of certain memoranda, and the writer of certain specifications and descriptions of the future undertaking, according to which "earth work" or the shifting of masses of earth and stones from place to place, the altering of natural slopes, the cutting or building of terraces, or the like, is done, and according to which trees are removed or planted, flowering shrubs are set out in one place or a

flower garden is prepared in another, and a new aspect is given to a tract of ground, whether an acre or a hundred acres in extent. The time required for the development and perfecting of such a scheme may be many months or several years, and only some slight suggestion of its future intended beauty can be had during the time of the artist's immediate supervision of it. In this respect the artist in landscape art is at a disadvantage. The architect is often commiserated because he is almost the only artist who never sees his work until all the world sees it; but the landscape gardener is in even a still more unfortunate position because, when he completes his labors, the result of those labors cannot even yet be fully appreciable. His edifice will not culminate for years; and he may never in his life see it as he imagined it.

Closely connected with the subject of this chapter is the placing of buildings with relation to one another. This is to be distinguished from the ordinary grouping of the parts of a building, the relation of its end pavilions to its central and largest mass, and the like. The difference between the two artistic efforts is apparently slight, but is appreciable and important in a certain way. In the one case the different parts of the structure have a similar destination and are essential to one another. On the other hand the placing of the different buildings concerns things which may be wholly

distinct, and do not concern one another except in so far as the art of a controlling designer whom we are compelled, for the want of another term, to call a landscape architect, is brought in to determine in advance what relation the different buildings should bear to one another. The most prominent instance of this in modern times is in connection with the great international expositions which have succeeded one another so rapidly since 1850. In all these the most marked instance of the application of this art was the Court of Honor at Chicago, in 1893. The several façades of white plaster which surrounded and almost wholly enclosed this great space were not in themselves important as designs, for they were rather of the nature of scenery than of architecture in the strict sense, having no relation to the buildings which were reared behind them; but the effectiveness of the great court, with the long-drawn colonnades on either side and the water filling the centre, was admitted by even the most critical visitors. The attempt to develop a freer design at Buffalo in 1901, of buildings which were smaller in proportion to the amount of ground enclosed and treated much more freely, with much less classical dignity and pretension, was only partly successful, and this chiefly because the buildings did not dominate the grounds sufficiently. As you went up the main avenue or one of the side streets of that great fair there was never a decided impression of architectural gran-

deur. An exception is to be made, of course, in favor of the Electric Tower, with the very interesting arcaded porch which flanked it on either side, better, or at least more thoughtful and more original in design than anything on the Court of Honor at Chicago, and interesting also in the application of color to its details. In the great exhibitions of Europe there has generally been inadequate space. The buildings have been crowded upon one another in such a way that the open spaces have rather the appearance of courts necessarily reserved for light than pieces of landscape which the buildings adorn and of which they form part. On the other hand, the unfailing taste of the French in the matter of decorative gardening has always been seen in the purely horticultural accessories. Nothing more effective in the way of decorative gardening with flowers and even flowering shrubs is to be found than that which was displayed at Paris in 1878, 1889, and 1900. Moreover the decorative use of water was very noticeable at each of these great exhibitions, and some of the Châteaux d'Eau created for these occasions have been made permanent, as mentioned above in connection with the Trocadéro Palace.

There is one of the forms of out-of-door display which, because temporary, and because dealing with such materials as are used indoors, has hardly been registered as a branch of landscape architecture. This is the festal decoration of city streets

and the like, a subject akin to that touched upon in Chapter XXVII in connection with the arrangement of flowers. You cannot say that your city street is the more beautiful for the poles arranged along it, the "masts" between which long swags of flowers hang and upon which banners are displayed. It is not your city that you are making beautiful; it is a special honor done to a man or to an occasion, and a special display of your festal intentions. It is like the illuminations and fireworks in the evening (see Chapter XXIX). The city is not the more beautiful for them; you take advantage of the city's being there to make your display of fireworks. Still, however, the same conditions prevail and the same kind of artistic energy is used in making the temporary as in making the more permanent display. The fact that nearly all of these temporary shows out-of-doors are ugly in their general effect in no way discourages any person from trying to make one that is beautiful.

It is curious to note how entirely the custom of displaying intrinsically beautiful things on the outward walls of houses has disappeared since the time of the Renaissance. Nowadays when a great captain is to be received with honor, the inhabitants do not hang their most beautiful rugs and their most splendid silks over the railings of their balconies; and yet nothing that they could show would make so brilliant an effect. They

would fear to be suspected of the desire to display their wealth, and so they keep their really beautiful stuffs within doors and hang out draperies which are far less beautiful in color as in material, if not actually ugly and in a way vulgar. Persian and Anatolian rugs, Indian dhurries, striped and patterned kelims, and even cheap printed cottons from Java, Persia, and the Mediterranean, would be fine in effect, in sunlight and shade. Then, too, they would be hung *flat*, hanging loosely from window sills and over the railings of balconies. National flags are very difficult to handle in these ways. If they are widely displayed so as to cover as much of the surface as possible, they are sure to be ugly in effect, and this because of their patterns in right lines and of their contrasting patches of vivid flat color; compare what is said in Chapter XX about armorial bearings. The most effective flag display known to the present writer was one made by Richard Morris Hunt, the architect, in a temporary building where, as it was in times of civil war, private and public liberality allowed of a great abundance of these national and other "colors." Hunt used them rightly, keeping the great flags nearly furled and letting them hang from nearly vertical masts and poles in noble, natural folds; the soft fabric of the bunting showing itself as fit to hang gracefully in this permanent and undisturbed drapery as to float and flutter in the breeze, and to show half-transparent against

the sky. It is rare, however, that such opportunities are offered, and the ordinary fashion of arranging the festoons of one's balconies in broad stripes of white and red, or in great surfaces of scarlet interspersed and broken by unexpected bands of white and blue, is almost never endurable when considered as an artistic result.

Chapter Twenty-Nine

THE IGNORED FINE ARTS

FIREWORKS AND ILLUMINATION; COSTUME;
THE DANCE; STAGE SETTING

IN this chapter must be mentioned very briefly some arts which are not often recognized as fine arts at all, but in which a distinct artistic quality is visible.

SECTION I. *Decoration by Artificial Light; Fireworks and Illumination.* The statement insisted on above (see Chapters XXVI, XXVII, and XXVIII) that these non-manual arts are chiefly the work of the director — the designer — the person who conceives a general scheme involving the work of others to perfect it, is true of festal illumination. Thus, when the famous annual lighting of the great church of St. Peter at Rome used to be carried out with thousands of lamps, there was nothing in each paper lantern or in each flaring oil-flame to affect the design of the “silver” illumination or the “golden” one which followed it. Everything depended upon the general layout, the decision of the final authority that certain lines of the cupola and certain lines of the body of the church were to be accentuated in lights,

and that a certain order should be observed in the starting of all these flames. On the night of Easter Sunday, as darkness fell, the whole outline of the enormous building, visible for miles over the Campagna, and every important detail, were seen drawn in lines of white fire upon the darkness. This was succeeded, as the bells struck the hour, by the golden illumination, which seemed to burst from the cross, four hundred and fifty feet above the square below, and flash down the outlines of the cupola and down the great columns of the front and the flanks of the church. The golden illumination had this peculiarity, that it was fluctuating and flickering, because the burning oil in the basins was not protected from the wind. A display such as this was only achieved at a heavy cost in money and at much risk of life and limb to the men who lighted the lamps. The perfection with which it was carried out came from years of experience and careful timing of the work to be done.

Now it is evident that the artistic thought in these matters is an appeal to that natural instinct which makes people admire the rows of lights along a quay or a bridge, doubled by their reflection in the water, and which causes our admiration for the starry sky, — except in so far as this last excites awe, — and which brings up our sentimental thoughts about the moon, when seen without the evidently beautiful setting of the clouds which she

lights up to such tenderness of gradation. Probably it is all akin to the staring of a baby at the lamp. We do like a bright light, and more especially a group or a row of lights; and it is the business of the artist in illumination to appeal to an enlarged and developed form of that natural taste.

Such illuminations are now made easy by means of electricity. Every one of the great national exhibitions during the last dozen years of the nineteenth century and since that time have been marked by electric illumination of exteriors and interiors alike. At the Paris exhibition of 1900 an extraordinary interior effect was produced by the lighting electrically of a vaulted hall of no great size, the walls of which were lined with mirrors. The space of the hall was divided into vaulting squares, and the intersection of every four squares was supported by a pier composed in part of a group of round-shafted columns. If there were six such piers there would be twelve vaulted chambers, twelve spaces covered each by a groined vault, which were of course indefinitely increased in apparent number, as were the piers, by reflection. The spectators, admitted into a wholly dark room, saw the building taking tangible shape in lines of pale red which grew constantly more and more intense, and was suddenly enhanced and made brilliant by a still more fiery glow. This was succeeded by a pale blue light which filled

the whole space and seemed to come from the surface of the vaulted roof; and a moment later it was seen that the columns themselves were giving out light, for the visible shafts were composed of glass and their illumination came from within. In this way the effect of colored light playing on varied surfaces, and multiplied by reflection was varied continually and with extraordinary brilliancy of effect for twenty minutes, and then a bright light from ordinary yellowish-white incandescent bulbs showed that normal conditions had returned and that the exhibition was over. There is of course no visible limit to what may be done in these ways by the use of electricity acting with glasses of different colors and with metals of different colors upon which the light may play. A different scheme, but one equally attractive, is that shown in certain electrical illuminations from without, of moving, or at least not perfectly quiescent bodies; as when a fountain is lighted in its different parts by green, blue, crimson or golden colored lights, or as when a dancer or a group of dancers, elaborately robed, do their posturing under a similar varying illumination. There is infinite opportunity for the display of good taste and of a delicate ingenuity; but it will be noted that here, as in ordinary decorations of interiors and the like, for which see Chapter XXVII, the work of the artist with his own hands hardly comes into the account. It is still the director who

stands at a distance and gives hints and corrects errors, he having previously given his general orders. And this art differs from the manual arts very greatly in its physical conditions. Thus the matter of size is comparatively independent of and apart from the amount of artistic skill displayed. It will require no more refined judgment, taste, and initiative to do such work on a vast scale than to properly illuminate a chamber of very moderate size; in fact, the doing of this on a small scale may be much the more difficult; whereas it is notorious and is easily seen how vastly the difficulty of a manual artist's work increases with the scale of his undertaking. Nor is "difficulty" quite the word. The kind of design and the nature of the mental power which grapples with a vast wall surface to be painted, and that which, on the other hand, makes a delicate flower-study on a paper four by six inches, are so different that the man may excel greatly in the one and be inefficient in the other. Nothing of the kind is to be predicated of those arts of a broader and bolder adornment produced by means of fire.

The use of transparent signs, lanterns with pictures or legends painted upon them, and such devices are of course wholly apart from the art of illumination. In so far as the coloring of a lantern is important to the general scheme of colored lights in combination, it concerns our present subject; but the display of an emblem or

a motto, if made artistic, as is of necessity very unusual, is of the nature of painting or lettering on opaque grounds. In a very few cases it is of the same nature as the decorative treatment of windows; and the reader is referred to Chapters IX and XVIII.

Fireworks are interesting as giving a combination of color with brilliancy in a very marked and striking fashion. The short duration of the display in each case seems only to add to the interest excited by the play of colored fires. In this, as in most other arts which appeal strongly to the popular taste, there is a great tendency towards coarse and trivial design, and the majority of what are called "set pieces" are quite beneath notice as works of fine art. The attempt to get an approach to realistic representation is the ruin of such art; and when we see a ship rocking on the waves, the whole produced by a series of explosive lights of different colors, we are perilously near to bathos. On the other hand, purely decorative fireworks are capable of being extremely interesting, even to a person of severe and highly trained artistic senses. The great bouquet of rockets, *la girandola*, as it is called, thrown up annually at Rome, formerly from the Castello Sant' Angelo, at Easter, but now from the Pincian Hill and at a different season, has perhaps never been equalled elsewhere; but a well organized and well handled display of what are known to the trade

as "aerial fireworks" may be made for one hundred dollars even in our community of high prices, and will be of extreme interest to all persons who have a sense of color. The development of the exploding rocket with its golden or colored stars into what is known as "the spreader," an invention or an improvement which may be dated from the last fifteen years of the nineteenth century, has greatly helped in this direction.

It is impossible to insist too strongly on the fact that the most wholesome way of approaching the study of fine art is to look at it as closely connected with the simplest tastes — with the enjoyments of children or the ambitions of primitive peoples. It is as lovers of bright colors and of comely forms that we should approach any work of art whatsoever. The more artistic nations understand this. In French writing about the fine arts it will be noted that there is no sharp distinction made between the art of popular display and the art of the loftiest metaphysical subtlety; and this in spite of the fact that many of the artists especially connected with the established institutions of France are constantly working against the decorative side of their own art.

SECT. II. *Costume.* The art of dress has taken on more extraordinary changes than any other which has prevailed of necessity in every community. The difference between the standard of

excellence in one land and another — in one epoch and another — is bewildering even to the historical student of such matters. To consider in the first place our modern studies of the past, the spectators who look at a well-costumed piece on the stage are excusable if, as must often be the case, they have no real belief in the reality of the fashions put before them; and yet on the modern stage — taking that of the “Greek play” at this, that, and the other university, the London stage of Sir Henry Irving, the Bayreuth trilogies, and the New York *mise en scène* of Richard Mansfield and his rivals — a reasonable approach to verity may be thought to have been gained. This approximate sense of truth is not a common possession of the modern world. We still have vain imaginings of how our ancestors dressed. One very curious instance of this is in the idealistic way in which “knights in armor” are represented in the illustrative pictures furnished for books and magazine articles. The fact will not be admitted readily that the armor of the earlier Middle Ages presented, when worn, a general aspect clumsy beyond belief, so that in the reign of William the Conqueror or Richard I of England, a dismounted soldier, fully armed, was as much like a rook or bishop of the chessmen as like anything human.

The fact that Greek dress was, except for the possible *caleçon*, about which archæologists are in doubt, limited to a shirt and a tunic, is so hard of

acceptance by moderns that when the tragic actress "La Faustin," in the novel of that name, tells her *costumier* that he must really care more for becomingness and less for archæology in regard to her dress of Ariadne, and reminds him that "in those days they did not wear skirts, but we — we wear them," the reader of the novel is aware of a little shock of surprise, even if he be himself a student of such matters. On the other hand, the costumes especially designed in recent times are sometimes excellent, at least in general effect. Such are the dresses of "skirt dancers," good in color and in the sweep and play of soft materials, as may be partly seen in Fig. 19; and such are some, at least, of the fantastic devices of the operabouffe; well adapted to the brief moment of their appearance and to the concentrated light.

As to national costumes, — the costumes of natural development, — there have been times when a true artistic feeling has governed them, without serious interference from other influences. At other times the artistic sense has been largely modified by the eagerness to display wealth and willingness to spend it. Again, the necessity for warm clothing, which, when made durable and utilitarian, is certain to be heavy and clumsy, and the resulting disguise and disfigurement of the body and its movements, have caused a tendency toward the overlaying of the heavy garments by magnificent and costly additions, while

the main lines and masses remain ugly and even deformed. In very recent times, since the introduction of cheap materials, and of still cheaper work by means of sewing-machines, knitting-machines and the rest, and since the abandonment by all classes of special class distinctions in the matter of costume, the reign of fashion has spoiled everything by substituting for the deliberately prepared and long cherished style changing slowly, a whimsical modification of last year's *modes* which will be out of date and hateful in the course of another twelve months. All these things have to be considered; and the result is that there is less possibility of tracing evolution in the art of costume than in any other decorative art which we have to consider. The dress of each decade must be considered by itself, because in every such period, the dress of the previous one is found to have had less weight in determining its character than the sudden appearance of a foreign influence, a new material, an increased wealth, a larger knowledge of foreign men and manners, or a fresh impression of them. Every fresh style as introduced might undoubtedly be traced to its own origin, but an origin very probably in other lands or in remote times.

The only technical side of costume is that represented by tailoring and dressmaking, millinery work, and boot-making. Apart from these the industrial arts described above, weaving, embroidery,

leather-work, enamelling and metal-work, make up the possibilities of design in dress. But while it is perhaps inexpedient to describe here the processes of cutting out and sewing up any material, it must still be admitted that the costumes which we consider the noblest have depended wholly upon the make of the separate pieces, upon the way the cloth is cut out and sewn up. Costly and splendid materials and the addition of embroidery, together with the added brilliancy of jewels, have never made up a beautiful costume. And it will be evident to the inquirer that the work of the conscious and highly trained designer of costume has always run to the use of splendid materials, embroidery and jewels; and, moreover, that it has always tended toward such contradictions of the lines of the body as are found in ruffs around the neck; in strange prolongation of the body garment, the doublet or *pourpoint* or waistcoat, to a length contradicting the true height of the trunk; in strange stuffing and building out with springs about the hips; and, in the century beginning with 1810, to those incredibly ugly pieces of raiment, the trousers, and next to them the sack coat and the unbuttoned frock coat. This has to do with male apparel only; we shall find in a moment that similar conditions have obtained in feminine costume.

It must be accepted as an axiom that dress should be either tight or loose, either closely

adapted to the forms of the body or else falling in folds. Tights and drapery; the designer of a tasteful costume has those two great elements of design at his disposal, and, taking them, he can superadd ornamentation in color and in other ways to his heart's content, but he must begin with them. Now, the dress of men has long been a constant series of denials of the truth of this axiom, until we have reached the cylindrical "bags" (as the London slang has it, and very appropriately), straight tubes of cloth which hang without character, without suggestion of the very interesting forms beneath them, without beauty of fold or of shape, swaying about more or less according to the fashion of the day, but inevitably ugly beyond all possibility of remedy. As for the person above the hips, the man in his shirt-sleeves, or still better, the man in a loose flannel shirt, is not altogether ill clothed. That costume shows the person at least to the extent of distinguishing between the form and make of the torso in different men, the length and power of the arms, the setting on of those arms and their relation to the shoulder — much, indeed, of what is sculpturesque in the upper part of the body. In the flannel shirt all the above-named charm may exist, with an added grace of folds and incipient drapery.

“More graceful is his shirt of blue
Than your best Paris coat,”

as the poet has it, and indeed a man so clothed and busy about strenuous work is handsomely dressed if you do not see his person below the hips. As for the thighs and legs, since the day that the close-fitting breeches buttoned below the knee went out, and with them the tight-fitting *pantalon* tying with a ribbon or buttoning just above the ankle-bone, there has been no dress worthy to be noted as a piece of interesting costume. And this decadence has come, so far as we can judge, of what the designers of costume have done — whoever these designers may have been.

In feminine costume it is only too easy to ridicule the succeeding forms of ugliness, from the time of the great farthingale to the present. There have been years, and even spaces of two or three years, when a simple gown with more or less closely fitting bodice and unsupported draped skirts with a girdle at the waist, have been the dress of woman, and to those years one looks back with the gratitude that he feels for a pleasure past. A partial reappearance of this simple scheme has appeared in the shirt-waist and the comparatively heavy skirt of the last five years. As this is very useful and in a thousand ways convenient, it may hold its own for the women who are busily engaged and who must be out and about all day. The dress of fashion is only so far attractive when it allows arms and shoulders and neck to be freely

exposed ; and in this way it becomes pleasant as a costume only as it loses the character of costume. For let it be noted that what we shall find below of the partial exposure of the person by the Greek dress is different from this modern *décolletage* in that it is not a very simple garment hung on the shoulders and of necessity leaving exposed neck and arms, for which its very simplicity forbids it to provide a collar and sleeves ; it is, on the other hand, an extremely elaborate and carefully planned dress, in which the exposure of the neck and arms is as deliberate as possible. Apart from this extraneous virtue, the dress of fashionable women is continually more and more devoid of interest.

It is true that beautiful stuffs have gone out of use. Though they are made, it is only in a few factories where deliberate reproduction of ancient materials and patterns is the order of the day, and they have never — those Venetian velvets and Florentine gold cloths of the nineteenth century have never — prevailed with the world of elegance. On this account we cannot rightly judge of the effect upon costume of such patterned silks as we find in a sixteenth-century Venetian picture, but we can compare the personages in the picture, and we can note the surprising fact that beauty of dress results from the simple shape of the simply made garment, rather than from any industrial art more elaborate than the plainest possible weaving with a very slight use of color patterns of the

simplest kind. The chief of these costumes is, of course, that of the Greeks of the early historic time, of the great epoch when Athens held for a moment the hegemony of Greece. From that time on to the Roman conquest, a slow change in the direction of greater richness is noticeable; but the Roman dress, too, of any period previous to 200 A. D., is of extreme interest on account of its simplicity. The illustration in Chapter XXIV (Fig. 189) shows a woman robed as Greek ladies were robed on ordinary occasions out of doors or when visible in their homes. The chiton, or long under-garment, worn so far as we know next to the skin, and which in earlier days had been made commonly of a crape-like substance, becomes in the fifth century B. C. smooth like ordinary linen or wool—at least according to the dictum of the sculptors. It was very long and probably when ungirded lay upon the floor for twelve or fifteen inches all around the feet; this, then, when the girdle had been put on and drawn tight, could be pulled up at pleasure and kept in place, the fold of the upper part falling over the zone so as to conceal it altogether; in which case the chiton might commonly reach the ankles, though there are instances enough of its being worn much shorter than this. The illustration referred to shows a very short garment like a cape worn over the chiton, concealing that fold which, however, must

be supposed to exist, because the chiton has been pulled up until it just touches the floor. Fig. 215 gives three views of a draped statue in the Louvre, the so-called Diane de Gabies, that is to say, the

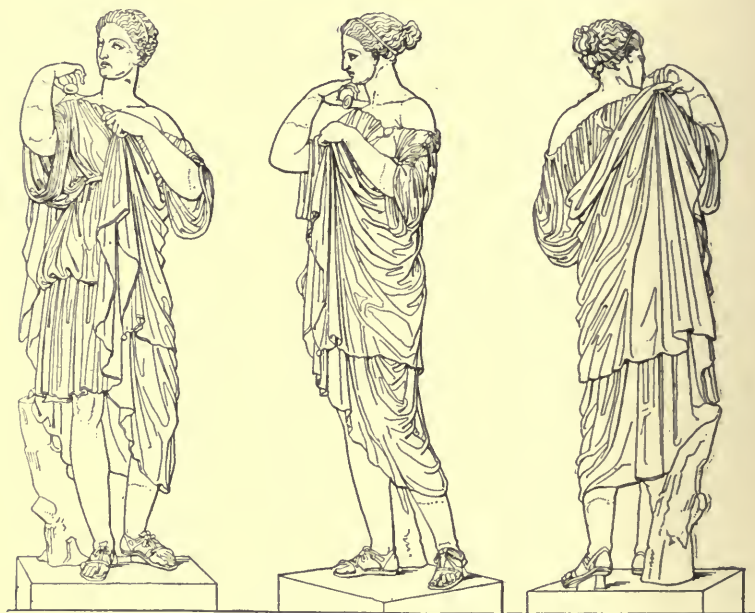


FIG. 215. Statue of Artemis in the Louvre. The chiton makes a deep fold over the girdle and conceals it; a second girdle is worn below the breast.

(From Clarac, Musée de Sculpture)

Artemis statue found at Gabii in the eighteenth century. What is very curious about this statue is that while the chiton has been pulled up so high as to leave the right leg bare to the knee,—the goddess being prepared for chasing the stag through forest and field,



FIG. 216. Grave Stele of Dexileos, died 394 B. C. : found on its original site in the suburb called Kerameikos at Athens

“ . . . dumosaque saxa vagatur
Nuda genu, vestem ritu succincta Dianæ,” —

she is still engaged in putting on with nice care her outer garment — that garment which Lady Evans (“Chapters on Greek Dress”) calls the *diplox* — the folded or doubled *chlamys* or outer cloak. The three outline drawings given by Clarac in his plate are chosen rather than the photograph (with which, however, they have been carefully compared), because the three views of the pose seem very desirable to look at side by side, and because the statue is not of such importance in art that the careful drawing may not stand for it. This outer garment is seen in many male statues and in reliefs of men in action as merely a square of stuff worn as a cloak is worn, or even more loosely. Fig. 216 is the celebrated relief of *Dexileos* which stood until lately in the place where it was found, — in the street of tombs which leads to the *Kerameikos* at Athens. The mounted warrior wears a short *chiton*, and over this the *himation*, the corners of which are seen to be loaded with little weights, much as the ladies of the nineteenth century sewed old-fashioned copper pennies or lead disks prepared for the purpose around the border of their riding habits. Short as the *chiton* in this case would be, when pulled out to its full extent, it is made still shorter by the method spoken of above; it has been pulled up through the somewhat tight girdle and allowed to fall

rather loosely over it, while what may be called its skirt barely covers half the thigh. The outer garment, the himation or cloak, might be very large and very warm and could be disposed about the person in almost any way. Moreover, no one pretends that the modern archæologist can learn from the statues and reliefs all that he would like to know about the Greek costume; the noticeable thing, the interesting thing, is that such simple appliances as these were taken by the artist of the time to be the fitting dress in which to represent a hero or a divinity.

It left the arms bare from the shoulder-joint; it left the feet and ankles bare except as the feet were thrust into sandals; it left the head and throat bare except as a broad sun hat was perched upon the top of the head, just as the petasus was worn by reapers in the field; nor was there any attempt to disguise the general contour of the body by corset-like bodices above, or spreading skirts below.

The dress of men was not so very different from that of women, the garments being indeed the same with this exception that they were much shorter, so that the legs, that is, from the knee to the foot, were always naked except for the boot or other protection of foot and ankle. Probably this tendency to show the body, where not undraped, at least so draped that its natural beauty is best set off by the clothes, and is never disguised

or contradicted by them except in the stress of winter or by necessity of warlike apparel, — probably this tendency has caused the acceptance of Greek costume as the noblest of all. It is partly the feeling that as the human body is the nobler theme for art, so, the more the dressing of the body is merged in the body, the better, because the more artistic is the result.

The contrast between this and any elegant dress of modern Europe, such as that of the nobles of the court of Henry IV of France, is too great to be easily understood. Let it be admitted that France has a cooler climate than Greece, yet has Greece not a tropical climate; Greece has a winter too severe to allow of the Greek dress, according to our modern notions of comfort and health, and France is not so cold that men and women must go muffled out of all recognition by stuffed and misshapen garments built out from the body to the destruction of its seemly proportions. In fixing that epoch (1594-1610) we choose a time when the character of elegant dress had become somewhat less artificial than it had been under the fantastical Valois kings. In the dress of men, the *pourpoint*, which covered the body from the waist to the neck, was indeed stiffened by busking of some kind, with the same purpose as that which underlies the padding-out of modern coats when the fashion is for shoulders more broad and square than those of the natural man; and

this stiffening had the obvious purpose of keeping smooth the surface of the silk, the better to display elaborate embroidery. From the waist to the knees, the *hauts-de-chausses* were bombasted,¹ or sometimes built out upon springs; but before 1600 the fashion had changed completely in this, the legs from mid-thigh were covered with smoothly drawn stockings, and the old *hauts-de-chausses* were replaced by what must have seemed a skirt gathered in below and closing tightly around each thigh, while the same pattern of brocade, or the same design in elaborate embroidery, covered the whole surface, body and skirt alike, making one garment out of what had been two, the doublet and the body part of the hose. This is the dress shown in Fig. 217. Fig. 218 is Vecellio's trustworthy record of what a citizen wore anywhere in the Trevisan mark of the republic of Venice, that is to say, in the towns north of the Adriatic Sea, from about 1585 on. One likes to study the costumes of this draughtsman and author because he was not over particular as to details of embroidery and cared much more for the way in which the dress was put upon the man or woman and the way in which the man or woman looked in the dress. So this "cittadino" who may be taken as one of those rich and statesman-like merchants of whom Venice was proud — who asso-

¹ *Bombasted*: stuffed with hair or a similar light and elastic substance, somewhat as cushions are stuffed in the twentieth century.



FIG. 217. Contemporary portrait (engraver uncertain) of Henry Frederick, Prince of Wales, who died young in 1612

ciated with the proudest nobility of Europe — whom Shakespeare discovered in his preternatural way and immortalized in Antonio, wears just so much of the dainty court dress as a man could wear about his affairs, whether in the noiseless streets and squares of Venice or in the more usual conditions of a landward town — Treviso, Vicenza, or Verona.

Fig. 219 shows the more free and easy dress of the man who, though off duty for the moment, may still be sent into the field at short notice, in which case he will have to change his dress in so far as may be necessary to don the cuirass and taslets



FIG. 218. Citizen's costume of about 1576

(From Vecellio, *Degli Habiti Antichi, et Moderni*, Venice, 1590)

and to replace the plumed hat by the morion or the more elaborate casque. This man, not pretending to be a person of easy circumstances and civic dignity, eschews the silk bonnet, the ruff and

the jewelled buttons, and wears a broad collar turned over his doublet.

The extreme ugliness of line, the stiff but swaying movement of the short skirt seen in Figs. 217



FIG. 219. Soldier off duty, 1588-9,
wearing "Savoyard breeches"
(braghe alla Savoia)

(From Vecellio, *Degli Habiti Antichi, et Moderni*,
Venice, 1590)

and 218, the awkwardness of a dress which neither aided the lines of the body nor yet replaced and concealed them by drapery graceful in itself, the setting-off of the whole by the *fraise* or ruff, which, though much diminished in size, was still large enough to look like a round tray supporting the head—all of this would have been insufferable but for the beauty of material and delicate workmanship in its treatment—the elaborate needle-work, not in the way of em-

broidery alone, but in the modification of all the surfaces by tricks of fulling, pleating, quilting and the like, and the addition of pearls or what passed for pearls, with other kinds of beads and gems in

various settings combined with the general design. The illustrations, portraits of Henry IV, Fig. 9 from an old bas-relief, and Fig. 144 from a contemporary print, illustrate this partly because of the elaborate way in which the king has been turned out by his valets and their coadjutors, the mantua-making tailors, — the way in which the hair and beard have been stiffened with pomade and rolled over “curling sticks” of some kind, how the ruff has been delicately adjusted so as to separate the head from the shoulders as completely as possible while concealing the neck, how the pourpoint has been made up with elaborate stitching, do not need to be further described than by the print.

The dress of the women was so far worse that it disguised still more the form of the body. The corset, made of very heavy material and laced up strenuously, in some cases laced afresh every time that the costume was donned, substituted for the natural form of the body, from hips to collar-bones, a shape as of an inverted cone; and this more forcibly because of the pointed stomacher of the years from 1580 to 1605. In the same fashion the *vertugaudin* or farthingale, as the word was afterward written in what was supposed to be English, disguised all the natural facts of the outward curve from the waist to the hips, and substituted for it the form of the top of a bell, gradually growing more abrupt as the uppermost horizontal hoop

rose higher until it was on a level with the hipbone. The arms had to be left comparatively free, but their delicate roundings were concealed beneath a series of puffs succeeding one another from shoulder to wrist, the shape of the head was disguised by puffed and stiffened masses of hair, the neck was concealed or disfigured by starched collars rising behind it or standing horizontally and disk-like below the chin, and none of the facts of the human contour were acknowledged except those of the face from chin to brow, the ears, the hands, and the ankles from the edge of the skirt to the fantastic high-heeled and embroidered shoe. An excellent commentary upon this costume is that made by Richard Grant White in explaining what Shakespeare meant by his Rosalind in doublet and hose. The shrewd critic points out that the dress of the time when "As You Like It" was first performed, say 1599 A. D., was so violently differentiated from the natural covering of the body that a young man of delicate build and a young woman of vigorous frame and energetic walk might readily be mistaken for one another, so far as sex is concerned. It would be easy to select a still more monstrous denial of natural facts in the way of costume; but it is not necessary to consider the extremes. The common facts are bad enough; and indeed there is no part of the record of human ingenuity in the wrong direction more vexatious than the history of costume since the classical

standard of what was beautiful disappeared with the fall of the Western empire.

This dress of the close of the sixteenth century is, then, not the worst that we know; but it is bad; and it is probable that social and religious influences acted together to make it what it was. The ruling influences would seem to have been these: The power at court was in the hands of elderly people, and they, not being beautiful in the ordinary sense, tried to make themselves fine; while as for the young people, it was more than their lives were worth not to follow the fashion set by their elders and superiors. As for the arranging of the hair of the head and of the beard, the dyeing of it, the dressing of it with pomade, the piling of it up into ridges and hard set curls,—all this is as indescribable as it is hard to conceive, nor is anything except the make-up of a modern actor in a difficult part comparable to the daily toilet operations of a courtier of the seventeenth century.

It is evident that two different principles controlled the art of costume in these two different sets of circumstances. The Greek of good family and the sixteenth-century person of fashion had wholly different views as to what made beautiful and fitting dress. The grand culmination of what may be called the mediæval idea is to be found in the church vestments which in the largest Christian communions have been more or

less in vogue from the period of Byzantine splendor until our own time. The mediæval idea is that the body shall be concealed by vestments made of magnificent and costly stuff, rich in pattern, and splendid in color, or as a substitute for this, sometimes as an aid to it, embroidery involving days and weeks of patient labor upon a single garment. The result was, of course, in those days of traditional power and skill in decoration, the production of such brocades and patterned silks as we now admire and cherish in little pieces; and also in a multiplication of strange and unsightly forms caused by the extreme difficulty that has always been found in dressing the human body otherwise than by a simple girded gown.

The essential fact in all this is the radical difference between the two methods of designing costume. In the one case the girded gown is adorned as far as simple stripes on the edge or simple pattern in the stuff might allow, or at times greater elegance is sought by the substitution of single plain colors with but the slightest relief in the way of a border. Personal jewelry is confined to the clasp of some kind at the shoulder. Everything is as realistic and as natural as the dress of a South Sea Islander when he adds to his ordinary skirt or waist-cloth a piece of material which is hung upon the shoulders. It is as natural as that, but more graceful, because years of study had been given to that which the islander hardly

regards as important, and ignores except on certain state occasions. The mediæval, from the fifth century on, adopts a wholly different plan, and the reasons for this are not now our concern. We are interested in the facts alone, that the ornamental designer in tailoring and in embroidery, in jewelry and leather, had an immense field open to him which he knew how to cultivate; but that the very fact of this devotion to dress as an ornamental art was the destruction of costume in what we now know to have been its highest and most beautiful form, that of the simple appliances of Grecian antiquity modified slowly under the Roman domination.

The difficulty with the study of costume is, then, its very immensity, the extraordinary distance in spirit and significance between the dress of one time and of another, although the principles of design in it are, and remain, very simple. This too is of all the industrial arts the one which has least chance of being interesting in our own time, — always with the exception of personal jewelry, to which no allusion has been made here (see Chapter X). As regards the garments worn by men and women it seems less likely that they will become the medium of artistic thought than it is that any other industry should become a medium for fine art.

SECT. III. *Stage-Setting and the Adornment of the Theatre.* This, in antiquity, was of extreme

importance, and was treated with a semi-religious gravity. Although this condition was largely caused by the intimate association of dramatic performances with the worship of Dionysos or Bacchus, yet the far more serious way in which the ancients approached the study of their poetry and the recitation of poetry would tend to make it prevail even in the presentation of rather farcical comedies. The stage-setting was therefore hardly a temporary matter; the changes made in the disposition and appearance of the scenery were but slight; the essential feature of a great theatre was that its permanent background, the architectural composition against which the performance was seen as it gradually unrolled itself, should be extremely dignified. A strictly architectural podium¹ forming the front of the stage in a Roman theatre and at least in those later Greek theatres which were built under Roman influences, served as a basement to the somewhat lofty wall with its display of openings, niches, and columnar decoration, which, though set back from the podium by the whole width of the *skene*, *scena*, or stage, was yet seen by the audience as if rising

¹ *Podium*: any continuous and unbroken pedestal or wall carried so far horizontally as to support a building or part of a building, or to contain and enclose a space, as in a circus or amphitheatre. The Roman temples were generally set upon a somewhat high podium. The front wall which supported the high Roman theatrical stage is called the podium, and so is the wall which seemed at once to support and to inclose the front rows of seats in a circus.

from it somewhat directly. The stage-setting of the ancients may be taken to consist primarily of the architectural surroundings so arranged and combined, and secondarily, of costume, of a specially technical, traditional, non-imitative sort, hard for moderns to conceive.

In the Middle Ages, and at a much later time, during all the era of the great dramatic production of England in the sixteenth century or of France in the seventeenth, stage-setting in the modern sense was hardly an art by itself. If a play was performed in the Globe Theatre on Thames-side, brilliancy of effect was as little aimed at as was archæological accuracy of costume; and when the troupe of Molière played before Louis XIV at Versailles or in the Theatre of the Palais-Royal, the decorations were such as would have been organized for a ball, for a religious ceremony, for a stately reception, — that is to say, they had nothing to do with the play, nothing in common with scenery, in the modern sense, and were pieces of festal adornment of a temporary character, with mock architecture of light material easily removed, with much display of gilding, of wreaths, and of banners.

In modern stage-setting we have to distinguish between the attempt of the scene painter and the stage carpenter to produce a deceptive imitation, and the decorative display properly so-called. There is thus nothing artistic in that which we

have seen on the stage in New York, where the burning of a house was thought to be imitated in a realistic way by arranging an outer wall of hollow boxes, imitating stones, which wall at a certain moment was seen to open in zigzag cracks, to totter and then to fall with a resounding crash, leaving within a very well managed imitation in burning drugs of the still glowing embers of a wooden interior. With all this our present inquiry has nothing to do; and in like manner the ingenious effects by which the moon, in a drop scene or in a diorama of any sort, is made to rise gradually, a little faster than in nature but meant to look like nature, are without value in the artistic sense. So much amusement as this may afford to the audience is apart from the appeal to their sense of the beautiful or even their sense of the appropriate and comely. Fine art is indeed the appeal to childish tastes and sentiments grown stronger and more exacting; but not to all such sentiments. The love of imitation by man's work of an aspect of nature or of human action or its results is not artistic except in the lowest and most unimportant way. We need not trouble ourselves here, or in the discussion of even realistic sculpture and painting, to inquire how far external effects are to be imitated; they are not to be imitated at all! The thought of them, the significance of them, is the business of fine art, but the reproduction of

them so as to be deceptive is the business only of an innocent but inferior art, that which has to do with tickling the fancy by the sense of a momentary deception.

On the other hand, when a modern stage manager arranges his stage for the better setting-off of a ballet, when the costumes of the dancers are skilfully combined with one another and each is such as to set off and insist upon the grace of posture and the daring agility of movements which each individual dancer may reach, and when the drop scene, the flies, and even the great opening of the proscenium are so combined in color and in visible form, whether permanent or temporary, as to do the utmost justice to the artistic display which they frame and set off, then an approach to ancient dramatic perfection may be thought to be made. It is for this reason that the ballet is our most artistic stage-presentation. The matter of the dance is treated below; but it is only in connection with the dance that the modern director seems to be able to secure an artistic treatment of his stage and its accessories. The ordinary drama is so badly handicapped by the desire of each actor, and more especially of each actress, to look attractive and to be "made up" in such a way as to be seen from the farthest recesses of the house, that the common result is generally ugly. It is quite conceivable that a lover of the drama, who is also a lover of beauty

in fine art and is accustomed to seek for it everywhere, will be kept from going to the theatre in our modern cities by the very fact of the ugliness of everything. From the actresses with eyelids so blackened that to a keen eye or to an opera glass their faces are as it were deformed or diseased, through the whole paraphernalia of badly worn and ill-understood costume, half assimilated and half hanging like "a shirt on a handspike," as the old sailor phrase used to be, to the hideous lighting from below, so hideous that when it is fairly well represented in a *Punch* caricature or is seen in a snap-shot photograph, it at once becomes ludicrous, all is done, insensibly and unconsciously, but still done, to make the stage repulsive to a person whose eye for beauty is keen and sensitive. It is the penalty of highly developed taste that it cannot, unless under strong inducement, bear violent shocks to its sense of right; and, as has been said in the discussion of Costume, so in the matter of the stage, if, in the chase after close imitation of nature, the dignity and beauty of the drama is lost, whether in external appearance or in the delivery of verse, the value of the stage disappears and with it all use for the theatre beyond that which may be thought to inhere in any amusement accessible to the public.

SECT. IV. *Posturing and the Dance.* These are practically one art. In fact it has been said, half

in jest but also half in earnest, that in the Far East and in the Pacific Islands the dancer moves the upper part of the body and the arms, and may even be seated; that in the Levant the dancer moves the whole body and the arms but does not lift the feet in her most important displays of skill; that in Europe only is dancing done with the legs. In fact posturing and the dance are one and the same, and the main distinction to make is that between the dancing which one does one's self for the sake of vigorous exercise and the sense of rapid motion, mingled with the enjoyment of the combined rhythm of the music and the dancing feet, and which is not a fine art at all, and the dancing which is done by skilled performers for the benefit of the spectator, which is a fine art capable of very high and very subtle refinements indeed. The slow and stately dancing of more courtly times than these, the minuet, the pavane, and the seguidilla, must have had much of that spectacular charm which we now find only on the stage. No one would find much artistic pleasure in looking at a number of couples dancing a modern "square dance" of any sort, from the old fashioned "cotillon" to the quadrille, or in looking at a room full of couples enjoying the mazurka or the schottische of half a century ago, or the waltz of to-day. With some sympathy you look at these young people heartily enjoying their athletic exercise; a romping "contra-

dance" would come still nearer to your heart ; but there is nothing in the movement or the momentary postures of the dancers to attract the eye seeking for beauty. A well made young person of either sex can hardly be altogether unpleasing, whether quiet or in active motion ; but everything which the teaching of the dance can do has been done to bring about that result, if it were possible.

On the other hand it is to be confessed that few European students of art have ever seen the dance in its artistic developments. That which we are told, and that which we can infer about the dances of the Far East, or again, of the nearer Mohammedan East, is in the highest degree attractive to the seeker after beauty highly developed, and harmony delicately managed. Our business, of course, is not with the *tours de force* described by residents in the Levant — the rippling muscles, the imitations of the action of a person chasing an insect, or the like ; our business is merely with the beauty of pose as of living sculpture which the more sedate dancer of the East, of Java, Japan, Samoa, or Ceylon presents to the spectator. It is a deliberate and traditional art wrought up through centuries of development, and as little admitting of sudden or voluntary change, as the European art of sculpture. The photograph must be generally powerless to render this charm. No one but a most skilful taker

of instantaneous pictures, so favored by circumstances that his presence would be unknown to the dancer, could secure photographs which would be not rather misleading than instructive. We are compelled to take the verbal descriptions of those few travellers who have seen and have known how to see, and the graphic representations of those few artists who have seen and who have also known how to see ; and with that our knowledge of this subtile and dignified art unhappily stops.

Chapter Thirty

CONCLUSIONS

THE arts of handicraft which are treated in Part III of this work are sometimes decorative, sometimes representative. Of course there are many works of art which serve both purposes — which represent something, as a landscape, and which yet decorate, as when that landscape is painted upon a wall. And yet without much difficulty we separate decorative manual art from representative manual art, dividing each class from the other by reference to their obvious intention. Thus, although there has been throughout this work constant insistence upon the fact that the artist, in producing any work of art whatsoever, thinks almost exclusively of its artistical character, hardly conscious of its possible moral or intellectual or religious significance, yet very often it is his obvious intention to represent (not to imitate) a group of external objects. Blaise Desgoffe or Vollon, in painting a table covered with baskets of fruit, dishes of porcelain, and gleaming decanters, is trying to make the most attractive composition possible in color and in form, or

rather in both combined ; but still he is really trying hard to make the cut orange remind you of the actual fruit, its plumpness, its pulpiness, and its juiciness. In like manner the illustrations given with Chapter XXV show how completely the artist is engaged in the twofold task of recalling the interesting facts of nature in forest and cliff, or in heads, hands, and drapery ; in still water or in half-nude forms of vigorous men ; in snow-covered hill and houses and distant mountain-side, or in ruffled and yet smooth plumage of a brilliant bird. That manual art, then, the one treated of in Chapter XXV, is a representative art ; and so is the one which we call sculpture, commonly, and which is treated in Chapter XXIV. Chapter XIX also deals with an art, that of engraving, which is, at least in modern times and in European lands, more often employed in the way of representative art than in the way of decoration. Mosaic, treated in Chapter XVIII, allows of a purely representative treatment, but is none the better for being forced in that manner away from its true mission of adornment of walls and floors. Embroidery may deal with birds and flowers and bees in such a fashion as to be almost imitative, and certainly representative ; and yet is embroidery chiefly a decorative art. There is no reference here to Part II, which deals with the five mechanical processes. Those processes, carving, painting, modelling, staining, and drawing, are

used in the manual arts — the decorative and the representative arts alike.

Now here is the peculiar condition to be faced, that the arts not of hand-work — architecture, including the adornment of rooms, and landscape art, together with those fine arts which we have treated as commonly ignored, namely, the arts of brilliant lighting and of costume and the like, — are all purely decorative, and we are left with only the art of dancing and posturing as not to be classed in either category. The reader will immediately perceive the reason of this. The dance as the only art of which the living body is the medium, is so remote from our present study that we have to exclude it as we exclude music, and that imaginary art of the combining of perfumes which at different times has been proposed as a thing to study. The dance has no claim to be considered here except that it also appeals to the eye — that it also deals with subtile form.

It is not essential that this work should either open or close with an analysis of art — of the great group of arts which are devoted to beauty and joy and splendor and the ennobling refinements of life. The purpose of the work has been to explain, little by little, how the creative artist goes at his work in each one of the numerous crafts and processes which are within his reach ; and the past has been ransacked and the far away lands of Asiatic civilization have been explored, in

CONCLUSIONS

order that in every case the most marked and the most generally recognized triumph of each art might be brought to the front and explained. It is with regret that the infant arts of decoration in the United States have been generally passed by, and that in the main the nineteenth century has been disregarded, in all the matters of decorative art. This was inevitable because decorative art is of older or of more distant conditions than those of the Occident of the nineteenth century. What has been done in that way since the French Revolution has been uncertain, hesitating, of doubtful importance even when created by a strong personality and according to an ennobling theory of design. Fifty years hence that which has been done in the nineteenth century in this department may be brought to the front, but at the present moment any such inquiry as this will be more fruitful if we give it a richer and a wider field. So far as the arts of design are concerned only in the arts of representation did the nineteenth century excel.

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